MITSUBISHI ELECTRIC

# 3D DLP® HOME-CINEMA TELEVISION

## MODELS

## WD-92A12

# Addendum OWNER'S GUIDE

**This addendum is to add the model WD-92A12 to the 742/842 Series Basic Owner's Guide and on-line Supplemental Owner's Guide.**

**When using the WD-92A12, refer to the Basic Owner's Guide operational and connection instructions for the 742 Series. For use of additional features of this television, please visit our website at www.Mitsubishi-tv.com to view or download a Supplemental Owner's Guide. Follow the support link to the Product Documents page.**

- For questions:
  - Visit our website at **www.mitsubishi-tv.com**.
  - E-mail us at **TVsupport@mevsa.com**.
  - Call Consumer Relations at 800-332-2119 for operational or connection assistance.
- For information on **System Reset**, please see the back cover of the 742 Series Basic Owner's Guide.
- To order replacement or additional remote controls, visit our website at **www.mitsuparts.com** or call 800-553-7278.

PICTURE BY DLP TEXAS INSTRUMENTS

HDMI® HIGH-DEFINITION MULTIMEDIA INTERFACE

3D TELEVISION

6COLOR PROCESSOR

StreamTV™ INTERNET MEDIA

V47A

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853B733A10

**CAUTION**

**RISK OF ELECTRIC SHOCK DO NOT OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**MAINS DISCONNECTION:** The mains plug is used as the disconnect device. The mains plug shall remain readily operable.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

En français
Cet appareil ne doit pas être exposé à des gouttes ou à des éclaboussures et aucun objet rempli d'un liquide, comme un vase, ne doit être placé sur l'appareil.

**WARNING**: This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

**TV WEIGHT:** This TV is heavy. Exercise extreme care when lifting or moving it. Lift or move the TV with a minimum of two adults. To prevent damage to the TV, avoid jarring or moving it while it is turned on. Always power off your TV, unplug the power cord, and disconnect all cables before moving it.

**CAUTION**: When selecting a stand, base, or other furniture to support the TV, please make sure it is designed with the appropriate dimensions for stability and to support the TV's weight plus the weight of any additional equipment you plan to store.

***Custom cabinet installation must allow for proper air circulation around the television.***

## FCC Declaration of Conformity

| | |
|---|---|
| Product: | Projection Television Receiver |
| Models: | WD-92A12 |
| Responsible Party: | Mitsubishi Electric Visual Solutions America, Inc.<br>9351 Jeronimo Road<br>Irvine, CA 92618-1904 |
| Telephone: | 1 (800) 332-2119 |

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Changes or modifications not expressly approved by Mitsubishi could cause harmful interference and would void the user's authority to operate this equipment.**

**Please refer to the Basic Owner's Guide for the 742 Series and 842 Series Television and use the instructions about the 742 Series for:**

1. Connection information
2. Important Safety Instructions.
3. Setup and Operating instructions.
4. Care and Cleaning instructions.
5. Lamp Replacement Instructions.
6. Troubleshooting hints.
7. Software License Agreements,TV Warranties and Internet Applications Policy.

**For assistance call 1(800) 332-2119**

**Note:** Features and specifications described in this owner's guide are subject to change without notice.

MITSUBISHI ELECTRIC

# 3D DLP® HOME-CINEMA TELEVISION

## MODELS

## 742 Series
## 842 Series

# SUPPLEMENTAL OWNER'S GUIDE

- For questions:
  - Visit our website at **www.mitsubishi-tv.com**.
  - E-mail us at **TVsupport@mevsa.com**.
  - Call Consumer Relations at 800-332-2119 for operational or connection assistance.
- For information on **System Reset**, please see the back cover.
- To order replacement or additional remote controls or lamps, visit our website at **www.mitsuparts.com** or call 800-553-7278.
- MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or a Mitsubishi Authorized Service Center. See page 42 for complete instructions.

PICTURE BY DLP TEXAS INSTRUMENTS

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

3D TELEVISION

6COLOR PROCESSOR

StreamTV™ INTERNET MEDIA

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***Custom cabinet installation must allow for proper air circulation around the television.***

## FCC Declaration of Conformity

| | |
|---|---|
| Product: | Projection Television Receiver |
| Models: | WD-73742, WD-82742, WD-92742<br>WD-73842, WD-82842, WD-92842 |
| Responsible Party: | Mitsubishi Electric Visual Solutions America, Inc.<br>9351 Jeronimo Road<br>Irvine, CA 92618-1904 |
| Telephone: | 1 (800) 332-2119 |

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
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## Internal Fans

Internal cooling fans maintain proper operating temperatures inside the TV. It is normal to hear the fans when you first turn on the TV, during quiet scenes while viewing the TV, and for a short time after shutting off the TV. You may notice louder fan noise about 30 seconds after shutting off the TV and while using the **Bright** Lamp Energy setting.

**NOTE TO CATV SYSTEM INSTALLER:** THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR THE PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

**Note:** Features and specifications described in this owner's guide are subject to change without notice.

### TV Software

- Do not attempt to update the software of this TV with software not provided by or authorized by Mitsubishi Electric Visual Solutions America, Inc. Non-authorized software may damage the TV and will not be covered by the warranty.
- Automatic software updates will be downloaded over the Internet to the TV if StreamTV is set up and connected to the Internet.

## Mitsubishi Electric Visual Solutions America and the Environment

As part of its ongoing environmental efforts, Mitsubishi Electric Visual Solutions America, Inc. (MEVSA) joined the Electronic Manufacturers Recycling Management Company's (MRM) national recycling initiative. Your MEVSA TV can be recycled at no charge to the consumer through MRM's growing infrastructure of drop-off locations around the United States.

We encourage all of our customers to recycle their used electronics. All waste computer monitors, portable computers, digital picture frames, televisions, portable DVD players, desktop printers, VCRs, and video game consoles should be recycled.

For a listing of MRM recycling drop-off locations, please visit www.MRMrecycling.com. MRM can also be reached toll free at 1-888-769-0149

For more information about Maine's electronic waste law, please visit the Maine Department of Environmental Protection website at www.maine.gov/dep/rwm/ewaste/index.htm.

For other states please check your state or local government web sites for more information about local laws and recycling options.

## Lamp Replacement

When the lamp cartridge needs replacement, **replace the lamp yourself and save the cost of a service call.** See Appendix A for instructions.

**To Order a Replacement Lamp Under Warranty**
Visit our website www.mitsuparts.com or call (800) 553-7278. Please have television model number, serial number, and proof of purchase available.

**To Order a Replacement Lamp After Warranty**
Visit our website at www.mitsuparts.com or call (800) 553-7278. Please have the television model number available. Order new lamp part number **915B455012**.

**Children and TV Viewing**
The American Academy of Pediatrics discourages media use by children younger than two years. For more information, visit **www.aap.org**.

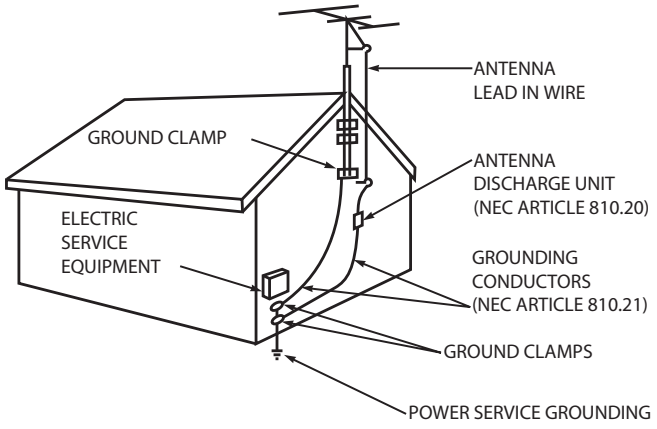
# Important Safety Instructions

Please read the following safeguards for your TV and retain for future reference. Always follow all warnings and instructions marked on the television.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

EXAMPLE OF ANTENNA GROUNDING




NEC — NATIONAL ELECTRICAL CODE

## Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.

## Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

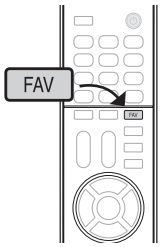
To avoid the risk of injury to the eyes and face, do not look directly into the air vents while the television is operating.

To avoid the risk of fire, do not use flammable solvents (such as benzene or paint solvents) or flammable aerosols (such as polishes, cleaners, or insecticides) near the television while it is operating or cooling.

# 1 Additional TV Features

## *FAV (Favorites)*

The **FAV** key gives you quick access to favorite program sources. Sources can be channels from the **ANT** input or devices connected to the TV. You can store up to nine favorites.



*Sample Favorites menu. Switch to favorite channels or inputs using number keys.*

***Adding Favorites***

1. Press **INPUT** and switch the TV to the input you want to add. If adding a channel, switch to the **ANT** input and tune to the channel.
2. Press the **FAV** key.
3. Move the highlight to the number position you want to assign to the channel or input.
4. Press **ENTER**.

***Removing***

1. While watching TV, press the **FAV** key.
2. In the ***Favorites*** menu, highlight the channel or input you want to remove.
3. Press **CANCEL**.

***Tuning***

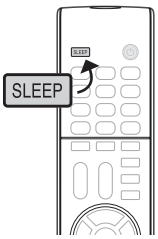
1. While watching TV, press the **FAV** key.
2. Press the number key for the channel or input you want.

## *Sleep Timer*

The Sleep Timer turns the TV off after the length of time you set. To set the TV to turn on at a certain time of day, see the ***Setup > Timer*** menu.

**Setting the Sleep Timer**

1. Press **SLEEP**.




2. Press **SLEEP** additional times to increase the time in 30-minute increments up to the maximum of 120 minutes.
3. Press **EXIT** or wait five seconds without pressing any keys for the message to clear.

**Viewing or Changing the Sleep Timer**

1. Press **SLEEP** to display the on-screen message.
2. Press **SLEEP** additional times to change the time before the TV powers off. To cancel the Sleep Timer, press **SLEEP** repeatedly until **OFF** is displayed.

# Picture Shape and Display Formats

## Format Definitions

Use the **FORMAT** key to apply the formats described here.

**Standard:** The full-screen format used by HDTV signals. Use this format to display anamorphic DVDs with a 1.78:1 or 1.85:1 aspect ratio. Anamorphic DVDs with a 2.35:1 aspect ratio are displayed correctly but with top and bottom black bars. Squarish (4:3) images are stretched evenly from side to side. Available for all signals.

**Expand**: Enlarges the picture to fill the screen by cropping the top and bottom; useful for reducing the letter box top and bottom bars of non-anamorphic DVD images.

**Zoom:** Enlarges the picture to fill the screen by cropping the sides, top, and bottom to eliminate black bars.

- ***480i/480p and SD 4:3 signals:*** Eliminates top and bottom bars on anamorphic DVDs with a 2.35:1 aspect ratio.
- ***720p, 1080i, SD 16:9, and HD signals:*** Eliminates bars added to squarish 4:3 images.

**Stretch**: Stretches a squarish 4:3 image across the screen to display the entire image with less distortion than the Standard format.

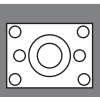
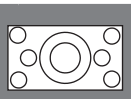
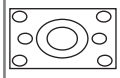
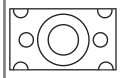
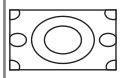
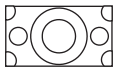
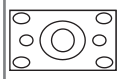
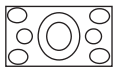
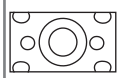
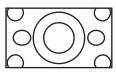
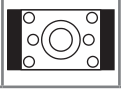
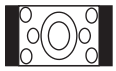
**Stretch Plus:** Similar to Stretch, but minimizes distortion on the sides by expanding the picture to crop off portions of the top and bottom. Use ▲▼ to adjust the vertical position of the picture.

**Narrow:** Displays narrow 4:3 images in their original shape. Adds black side bars to fill the screen.

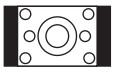
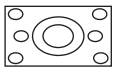
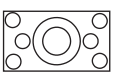
**Wide Expand:** Enlarges the picture, cropping the image on both sides. Removes or reduces black side bars added to narrow images converted to 16:9 signals for digital broadcast.

**Note:** All high-definition channels send widescreen (16:9) signals, but not all programming was created for the widescreen format. The broadcaster may stretch the image or add side bars to fill the widescreen area.

## Effect of Mitsubishi Formats on Picture Types

| Original Signal ➡ / TV Display Format ⬇ |  Non-anamorphic or SD 4:3 | |  Anamorphic DVD | |
|---|---|---|---|---|
| **Standard** |  | Distorted; Not recommended. | | Recommended |
| **Expand** |  | Recommended for letterbox. See Note 1. | | Distorted; not recommended. See Note 1. |
| **Zoom** |  | Distorted; Not recommended. See Note 1. |  | Recommended for anamorphic 2.35:1 images. See Note 1. |
| **Stretch** |  | Recommended for standard broadcasts. See Note 1. |  | Distorted; not recommended. See Note 1. |
| **Stretch Plus** |  | Recommended for standard broadcasts. See Note 1. |  | Distorted; not recommended. See Note 1. |
| **Narrow** |  | See Note 1. |  | Distorted; not recommended. See Note 1. |

**Note 1:** Available for 480i and 480p signals only.

| Original Signal | | Display Formats | | |
|---|---|---|---|---|
| **SD 16:9 or HD Digital 720p, 1080i, 1080p Signal** |  |  | **Wide Expand** | Recommended to remove side bars. |
| | |  | **Zoom** | Recommended to remove bars from the top, bottom, and sides. |

***TV Display Formats.*** *Press the* **FORMAT** *key repeatedly to see different displays for the current program. Press the* **INFO** *key to see the name of the format in use.*

## DVD Image Definitions

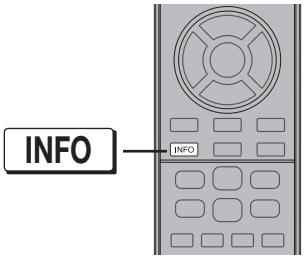
Image information may be stated on the DVD case. Some DVDs support both formats described below.

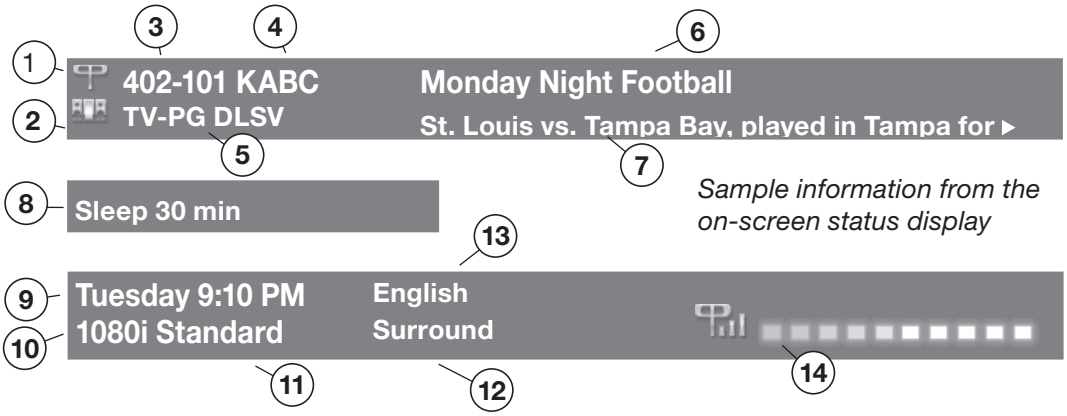
**Anamorphic (or Enhanced for WideScreen TV)**
Indicates DVDs recorded to show widescreen images properly on 16:9 TV sets using the TV's **Standard** format mode (recommended).

**Non-Anamorphic (or 4:3, 1.33:1, Letter Box, or Full Screen)**
Indicates DVDs recorded for viewing on squarish TV screens. They may be full screen (4:3 or 1.33:1) which crops movies to fit the narrow TV, or letter box, which adds black top and bottom bars.

## Status Display

Press the **INFO** key to see the on-screen status display. The most common displays are shown here.



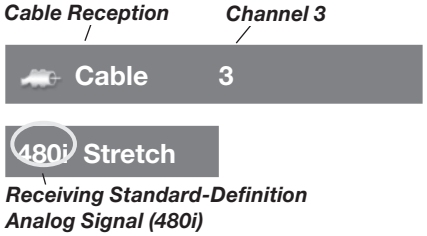

*Sample information from the on-screen status display*

### About Channel Numbers

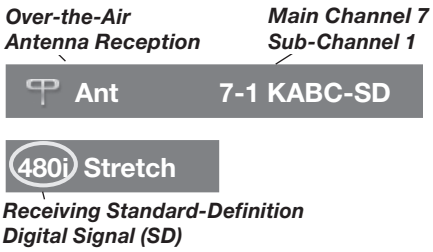
**Channel Numbers for Over-the-Air Reception or Reception by Direct Cable**

**Note:** All signals are automatically converted to 1080p for display.

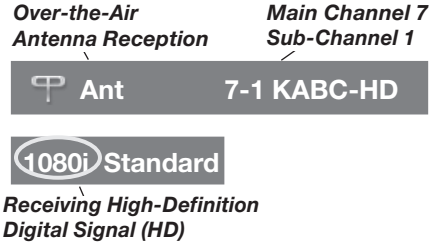
***Standard-Definition Analog Channels***




***Standard-Definition Digital Channels***




***High-Definition Digital Channels***




**1.** Current Input. Examples: Antenna, DVD, DVR, Game, Sat. Rcvr.

**2.** Audio Indicator. Key:
TV speakers, External sound system, Mute

**3.** Channel number (antenna source only)
Digital channel includes major and sub-channel numbers.

**4.** Digital channel name (if broadcast); antenna source only.

**5.** V-Chip rating
- Digital signal: Antenna source only
- Analog signal: Antenna or **VIDEO** composite jack

**6.** Program name (if broadcast); digital antenna source only

**7.** Program description (if broadcast); digital source, antenna only. Press the **INFO** key additional times to see more of the description.

**8.** Sleep Timer remaining time

**9.** Day and time

**10.** Signal type being received. See "Signal Definitions" on this page.

**11.** Screen format in use

**12.** Program audio indicator (antenna source only)

**13.** Available language (digital source, antenna only)

**14.** Signal-strength indicator (digital source, antenna only)

### Signal Definitions

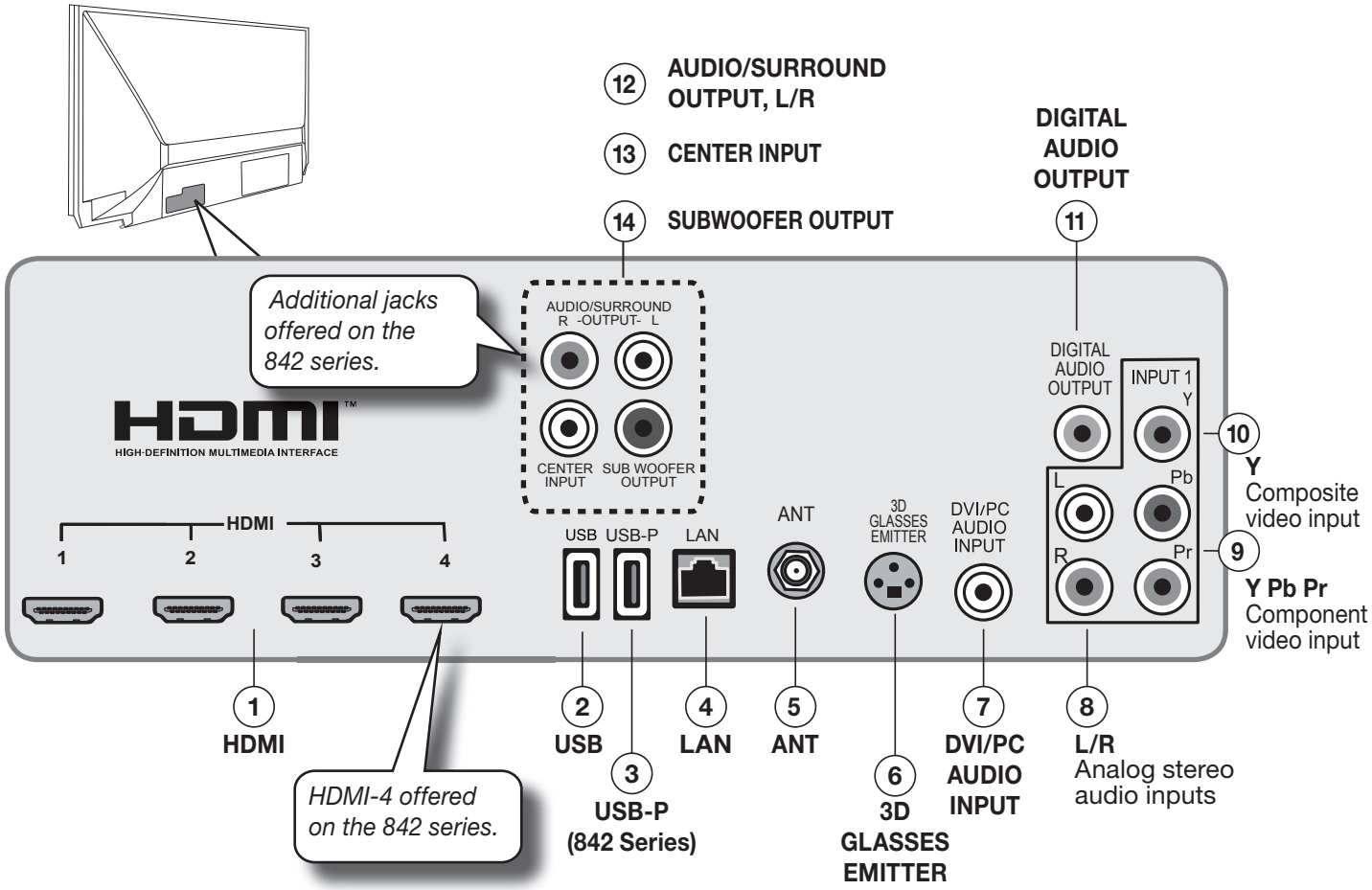
**480i:** Standard-definition, older type interlaced signals from the **ANT**, composite **VIDEO**, component **Y Pb Pr**, or **HDMI** jacks.

**480p:** Standard-definition progressive-scan signals on the **ANT**, component **Y Pb Pr,** or **HDMI** jacks.

**720p and 1080i:** High-definition signals received through the **ANT,** component **Y Pb Pr**, or **HDMI** jacks. These signals are always 16:9 (widescreen), but may contain embedded 4:3 images with sidebars.

**1080p:** High-definition signals from a PC, Blu-ray player, or some satellite and set-top boxes; HDMI inputs only.

## More On TV Inputs and Outputs




The Basic Owner's Guide supplied with your TV contains connection diagrams showing how to use most of these jacks.

### 1. HDMI® Inputs (High-Definition Multimedia Interface)

The HDMI inputs support uncompressed standard and high-definition digital video formats, bitstream Dolby Digital 5.1, and PCM digital stereo audio. These inputs are HDCP (High-Bandwidth Digital Copy Protection) compliant.

**Mitsubishi recommends you use high-speed HDMI cables** to connect newer source devices incorporating HDMI technology. High-speed cables bring you the full benefits of Deep Color.

These HDMI inputs can also accept digital DVI video signals. To connect a device's DVI output to the TV's HDMI input, use an HDMI-to-DVI adapter or cable plus an analog audio cable. Connect the audio cable to the **DVI/PC AUDIO INPUT** jack on the TV to receive audio from your DVI device.

Use the HDMI inputs to connect to CEA-861 HDMI compliant devices such as a high-definition receiver or DVD player. These inputs support 480i, 480p, 720p, 1080i, and 1080p video formats.

The TV's HDMI inputs are compatible with many DVI-D and HDMI computer video signals.

**HDMI Cable Categories**

HDMI cables are available as Standard and High-Speed types.

- **High-Speed HDMI Cables.** Blu-ray players, newer DVD players, video games, 3D content, and set-top boxes require High-Speed HDMI cables, suitable for clock frequencies up to 340 MHz or data rates of up to 10.2 gigabits per second. Use high-speed cables for 1080p HD signals carrying extended color encodings (i.e., 30 or more bits, also called Deep Color). High-Speed HDMI cables are also suitable for standard HDTV signals.
- **Standard HDMI Cables**. Standard HDMI cables may be unmarked. They are suitable for standard HDTV 720p, 1080i, and 1080p signals with 8-bit color depth. Use Standard HDMI cables for clock frequencies up to 74.25 MHz or data rates of up to 2.23 gigabits per second.

## *More On TV Inputs and Outputs, continued*

### 2. USB

- Use for a wireless network adapter to receive StreamTV Internet content.
- Use this port when updating the TV software using a USB memory device.
- The USB port can also serve as a standard USB 5-volt, 500-milliamp power output to power an accessory device.

### 3. USB-P (Power Only)

**842 Series.** Standard USB 5-volt, 500-milliamp power output you can use to supply power to an accessory device. See page 14.

### 4. LAN

Use the **LAN** Ethernet jack for streaming Internet video to the TV.

### 5. ANT (Antenna)

Connect your main antenna or direct cable service (without a cable box) to **ANT**. The **ANT** input can receive digital and analog over-the-air channels from a VHF/UHF antenna or non-scrambled digital/analog cable source.

### 6. 3D GLASSES EMITTER

Use this jack for the special synchronization emitter supplied with some 3D glasses. The emitter sends out an infrared signal that synchronizes your 3D glasses with the screen display.

### 7. DVI/PC AUDIO INPUT

Connect a DVI device to one of the TV's HDMI inputs and use this jack to send analog audio to the TV.

### 8. L/R (INPUT 1 audio)

Analog stereo inputs for use in conjunction with adjacent composite or component video jacks.

### 9. Y Pb Pr (Component Video)

Analog video inputs able to accept high-definition video from a high-definition source device. Use the adjacent **R** and **L** inputs if you wish to send audio to the TV speakers.

### 10. Y (Composite Video)

Analog standard-definition video inputs. Use the adjacent **R** and **L** inputs if you wish to send audio to the TV speakers.

### 11. DIGITAL AUDIO OUTPUT

This output sends Dolby Digital or PCM digital audio to your digital A/V surround sound receiver. Incoming analog audio is converted by the TV to PCM digital audio. If you have a digital A/V receiver, this is the only audio connection needed between the TV and your A/V receiver.

### 12. AUDIO/SURROUND OUTPUT, L/R

**842 Series.** Provides analog audio output of the current program. Use to:

- Send audio to an analog A/V surround sound receiver or stereo system.
- Send a rear surround sound channel to an external amplifier or self-powered speakers. See page 15.
- Send audio to headphones. Set ***Sound > Global > Analog Audio Out*** to **Variable**.

Digital audio from digital channels and HDMI devices is converted to analog audio by the TV for output on these jacks.

### 13. CENTER INPUT

**842 Series.** Connect your A/V receiver's center channel output to this input to have the TV speakers complement your external sound system with center-channel sound. Set ***Sound > Global > Center Channel*** to **On** to enable this input. See "Using the TV Speakers as a Center Channel," page 16.

### 14. SUBWOOFER OUTPUT

**842 Series.** Connect a powered subwoofer to this input to complement effects from the TV's speakers. Set ***Sound > Global > Subwoofer*** to **On** to enable this output (see "Adding a Subwoofer," page 14).

# Using the TV with a Personal Computer

## Connecting a Computer to the TV

Use one of the connection methods listed below based on your computer's output.

| Computer Graphics Output | Computer Graphics Connection | Audio Connection |
|---|---|---|
| **Digital DVI** | DVI-to-HDMI cable or an HDMI cable with a DVI-to-HDMI adapter | Audio cable with mini-plugs |
| **HDMI** | HDMI-to-HDMI cable | No additional audio connection is required. |

***IMPORTANT***

**This TV accepts digital computer graphics signals only. This TV is not compatible with VGA (analog) computer signals.**

1. Connect the computer's digital video output to one of the TV's HDMI jacks. See the connection diagrams on this page for the method suited to your equipment.
2. Connect the computer's audio output using one of these options:
   - For digital DVI video signals, connect the analog audio output to the TV's **DVI/PC AUDIO INPUT** jack.
   - For HDMI signals, no additional audio connection is required.

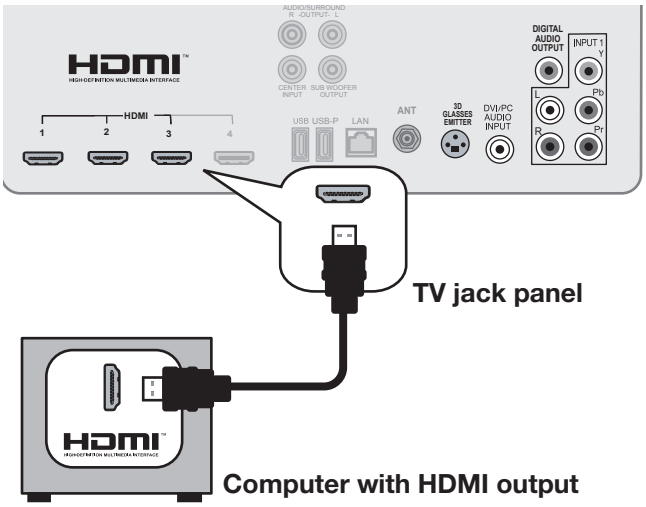
**Note:** **If you are unable to hear audio from the computer**, there may be an incompatibility in the computer's hardware, software, or internal settings. Consult a trained computer technician for advice.

3. Power on the TV and computer. The TV will detect the connection and display the ***New Device Found*** screen.
4. In the ***New Device Found*** screen, press ▲▼ to highlight **PC** in the list of device types. It is important to use the name **PC** so that the TV processes the PC signal correctly.
5. Highlight **EXIT** and press **ENTER** to close the ***New Device Found*** screen.

**Note:** If your computer provides digital audio output you can connect it directly to a digital A/V receiver and bypass the TV.

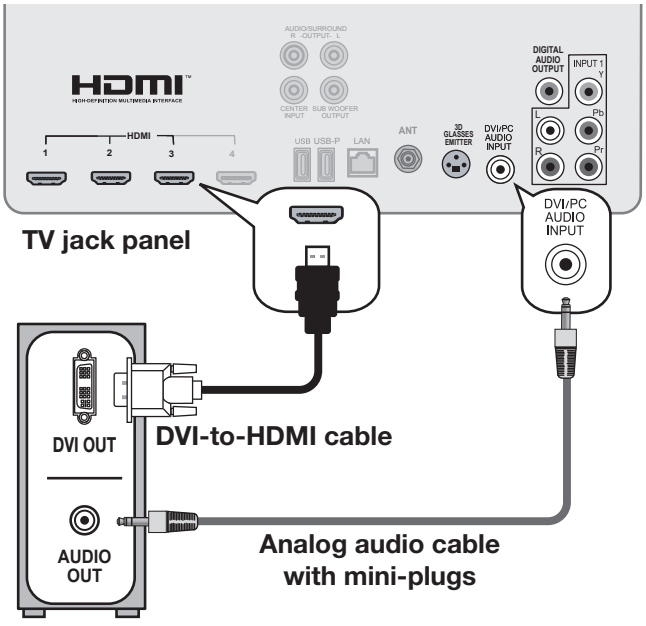
## HDMI Connection

Mitsubishi recommends using high-speed HDMI cables to connect newer devices incorporating HDMI technology.




*An HDMI-to-HDMI connection carries all video and audio on a single cable.*

## DVI Video Connection



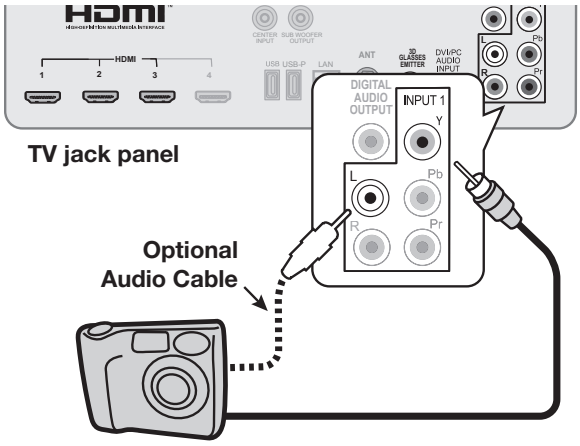

*A DVI connection from a personal computer requires a separate audio connection.*

## Specialized TV Connections

### Photos and Motion Video as Composite Video

Connect the camera to the TV using a composite video cable and control the slide show or movie through the camera. The display resolution will be standard-definition (480i).

1. Refer to the owner's manual supplied with the camera for instructions needed for this setup.
2. Set the camera's output signal type to **NTSC** and put the camera into playback mode.
3. With the camera still turned on, connect your digital camera's composite video cable (usually yellow) to the TV's **Y** composite video jack. To hear audio, connect the camera's audio output cable to the audio **L** jack.



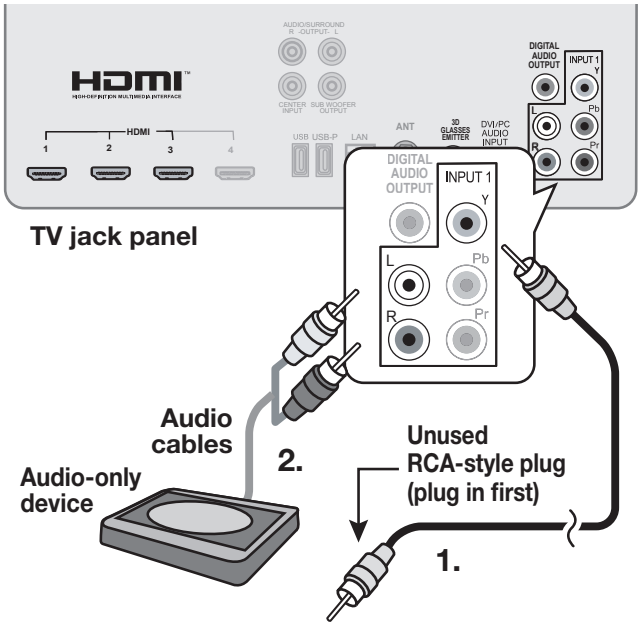

*Camera connection using a composite video cable*

4. When the ***New Device Found*** screen displays, assign the name **Camcorder**.
5. Press EXIT to close the ***New Device Found*** screen.
6. If viewing photos, control the slideshow from the camera. Advance through the images manually or check if the camera can advance automatically.

### Using the TV with an Audio-Only Device

To use the TV speakers to listen to an audio device such as an MP3 or CD player with analog output, follow these steps.

1. Insert an unused RCA-style connector into the **Y** composite video jack. The presence of this connector activates the TV's auto-detection.
2. When the TV detects the video connector, it will display the ***New Device Found*** screen. Name the new input **CD/Audio** or **MP3 Player**.
3. Connect left (white) and right (red) audio cables from **AUDIO OUT** on the device to **L** and **R** on the TV.
4. Keep the connector in the **Y** jack while using the audio-only device.



## Computer Video Adjustments

1. Power on the computer.
2. Select **PC** from the ***Input Selection*** menu. To do this, press **INPUT** to open the ***Input Selection*** menu, move the highlight to the PC icon, and press **ENTER.**
3. Working from the computer, change the resolution of the computer image. View the computer image on the TV and maximize the computer resolution while maintaining a suitable aspect ratio for the image.
4. Press **FORMAT** repeatedly to find the picture shape best suited to the image. See the chart on this page showing how different computer resolutions can be displayed on the TV.
5. Perform TV video adjustments. Press **VIDEO** repeatedly to access video-adjustment options.

***Distortion in Computer Images***

Computer images may show distortion when viewed on the TV, e.g., lines that should be straight may appear slightly curved.

## Image Resolution

Your Mitsubishi TV can display the resolutions shown in the chart from standard VGA (640 x 480) through 1920 x 1080 signals at a refresh rate of 60 Hz.

In most cases, the computer will select the best resolution match to display on the TV. You can override this setting if you wish. Refer to your computer operating system's instructions for information on changing the screen resolution.

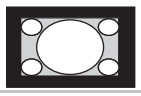
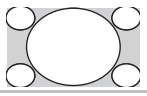
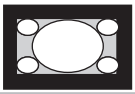
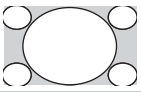
You may need to restart the computer for changes to take effect.

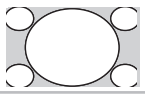
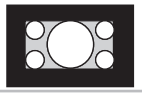
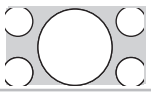
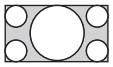
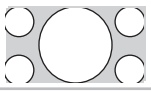
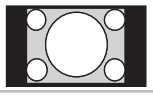
**Tip**

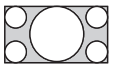
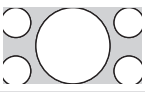
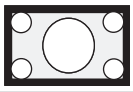
Set the computer's screen saver to display a pattern after several minutes of inactivity. This acts as a reminder that the TV is powered on.

## Computer Display Formats

Press **FORMAT** repeatedly to cycle through the TV displays available for your computer's video signal.

| Computer Signal | As Displayed on TV Screen | | |
|---|---|---|---|
| Original Format | 4 X 3 Standard | 16 X 9 Standard | Zoom |
| VGA 640 X 480 | | |  |  |
| SVGA 800 X 600 | | |  |  |

| Original Format | Standard | Zoom |
|---|---|---|
| XGA 1024 X 768 | | |  |
| PC 720p 1280 X 720 | |  |  |
| WXGA 1360 X 768 |  | |  |
| SXGA 1280 X 1024 | |  | |

| Original Format | Standard | Reduce |
|---|---|---|
| PC 1080p 1920 X 1080 |  |  |  |

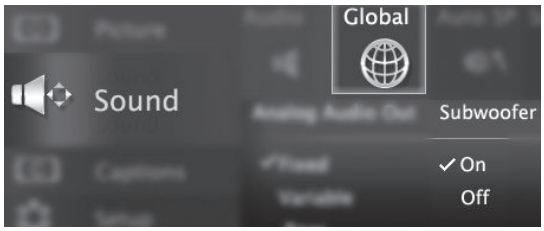
# Supplemental Audio Connections (842 series)

Add a subwoofer to complement the TV's speaker array or use the TV's speakers as a center channel for your external sound system.

## Adding a Subwoofer

Add a subwoofer to complement the TV speakers with a fuller bass sound.

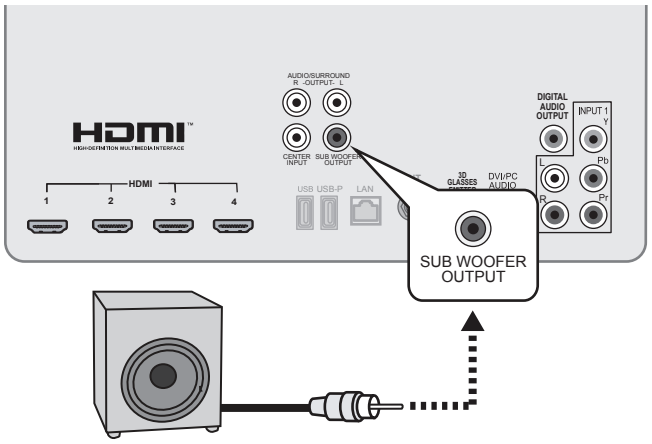
- After connecting a subwoofer, you must enable the TV's subwoofer output in the TV's ***Sound*** menu. Go to ***Sound > Global > Subwoofer*** and set it to **On**.




- To control subwoofer volume
  - Press the **AUDIO** key and then press ▼ to find the subwoofer volume slider. Press ◀ ▶ to change the volume.
  - Open the ***Sound > Audio*** menu. Highlight **Subwoofer** and press ◀ ▶ to adjust. Press **MENU** to return to the ***Sound > Audio*** menu.

### *Subwoofer with Audio Cable*

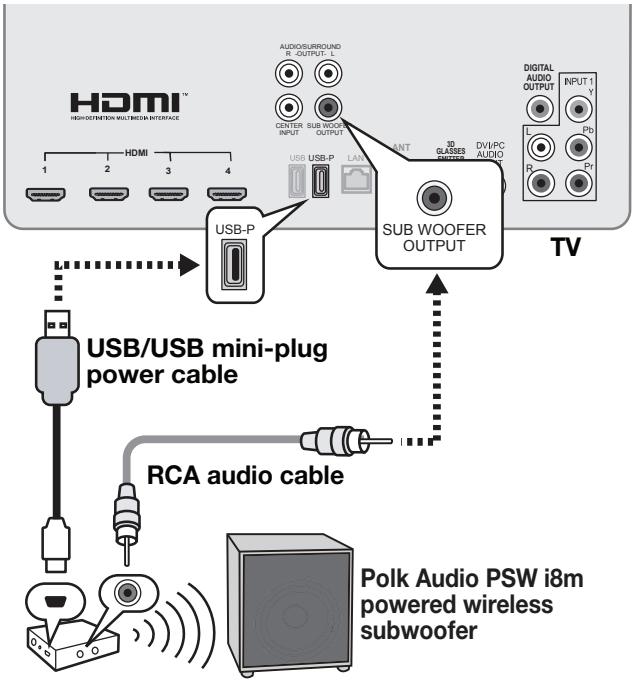
Connect the subwoofer directly to the TV's **SUBWOOFER OUTPUT**.




*Subwoofer with audio connection to TV.*

### *Wireless Subwoofer*

Mitsubishi recommends Polk Audio Wireless Subwoofer model PSW i8m. The transmitter module can be conveniently powered from the TV's USB power port. Connect an audio cable to the transmitter to supply audio from the TV's **SUBWOOFER OUTPUT**.

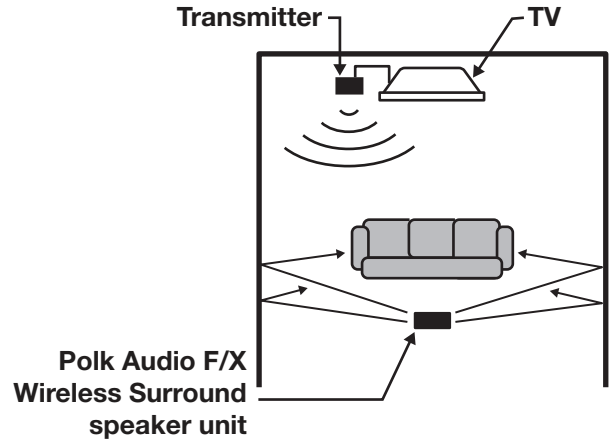



*Setup to send audio signals wirelessly to the subwoofer.*

## *Supplemental Audio Connections (842 series), continued*

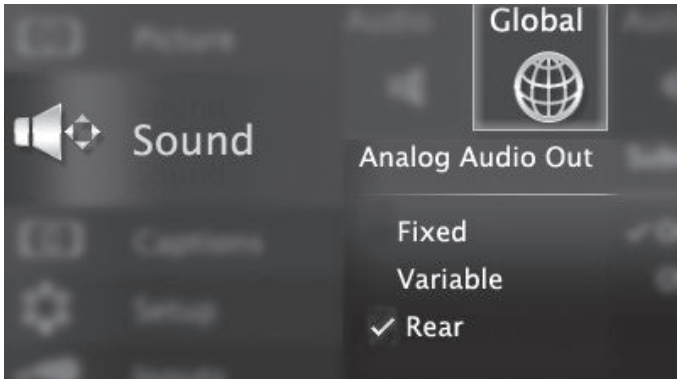
### External Rear Speakers

You may wish to supplement surround sound from the TV with external rear speakers. External speakers can fill in rear sound if your room lacks a rear wall suitable for sound reflections. Mitsubishi recommends Polk Audio's F/X Wireless Surround system.

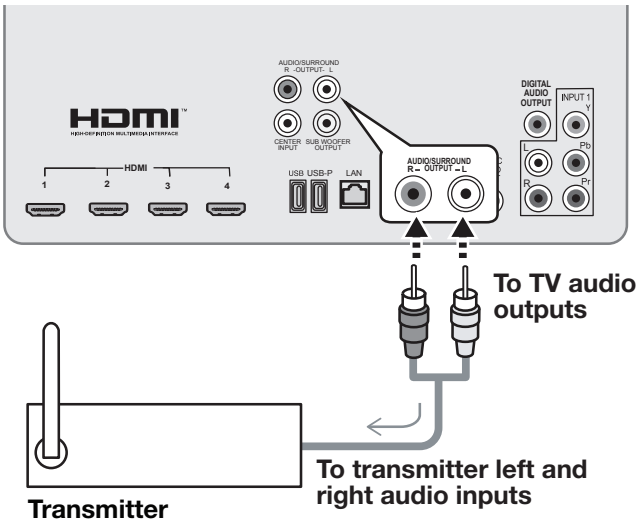



*Sample layout using an external speaker unit in a room without a back wall suitable for rear sound reflections*

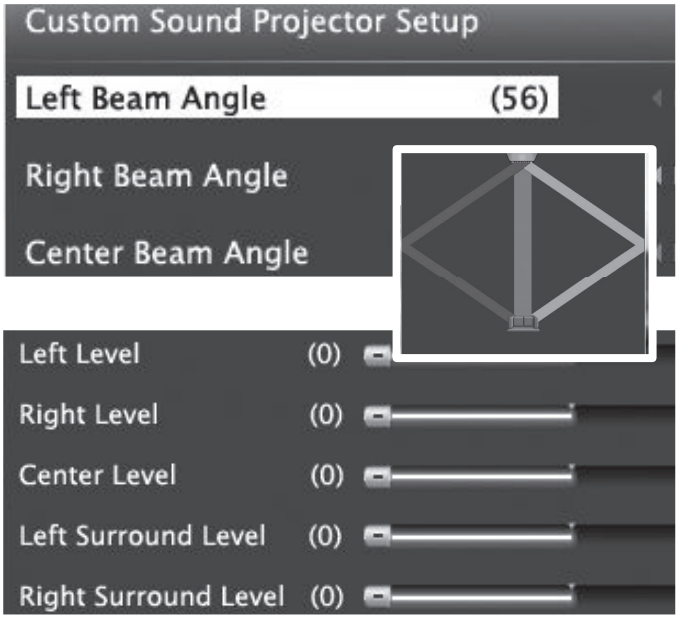
1. Position the external speakers as needed for rear sound.
2. Connect analog audio output from the TV to the Polk Audio F/X Wireless Surround transmitter.
3. Power on the TV, speakers, and transmitter.
4. Set ***Sound > Global > Analog Audio Out*** to **Rear**.




5. Adjust the sound output. Go to the ***Sound > SoundPro > CUSTOM*** menu.
   - ***a.*** Adjust beam angles for the left, right, and center beams.
   - ***b.*** Adjust volume levels for all audio beams, including the left and right surround beams.
6. Play sample audio to check the sound. Repeat any of the adjustments as needed.




*Connecting the transmitter to the TV*



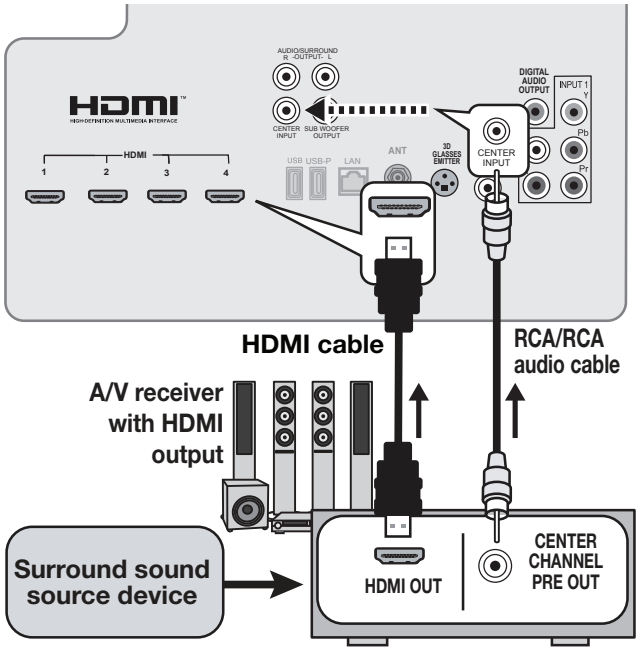

*Sound Projector adjustments when using external rear speakers.*

## *Supplemental Audio Connections (842 series), continued*

### Using the TV Speakers as a Center Channel

If using an external surround sound system, you can use the TV's speakers to provide center channel sound. Your A/V receiver must have a center channel pre out that can supply a pre-amplified center-channel signal to the TV.

*1.* Connect your A/V receiver's HDMI output and center channel pre out to the TV as shown.




*2.* Turn on the A/V receiver's center channel pre out if needed. See the A/V receiver's instruction manual.

*3.* Enable the TV's center channel mode. Press the **AUDIO** key and press ▼ to display the **TV Speakers** option. Press ▶ to select **Center**.

*4.* Compare the center channel volume from TV's speakers to the rest of the sound system. If the center channel volume needs adjustment,

- ***a.*** Press **AUDIO** and press ▼ to display the **Center Level** volume slider.
- ***b.*** Adjust TV speaker volume using the ◀ ▶ keys.
- ***c.*** Compare the center channel volume to the rest of the sound system. Repeat this adjustment if needed.

# *StreamTV™ Internet*

## About StreamTV

Internet services let you access many popular on-line applications providing both free and paid content.

This section describes using VUDU Movies and VUDU Apps. For additional Stream TV features, see the supplemental Owner's Guide at **www.mitsubishi-tv.com**.

**Required for StreamTV Internet media:**

- Broadband Internet service (at least 2 Mbps for SD, 4 Mbps for HD, and 8 Mbps for 1080p HDX)
- Category-5 Ethernet cable **or** a wireless router transmitting to an AzureWave AW-NU231 USB wireless adapter.
- Computer access to the websites of content providers when initial account activation is required for service.
- A credit card to cover the cost of paid content.

**Remote PC**

- You can display the PC screen on the TV via a home LAN network to use e-mail, social network services (SNS), and other online services on the TV.

## Home Network Setup

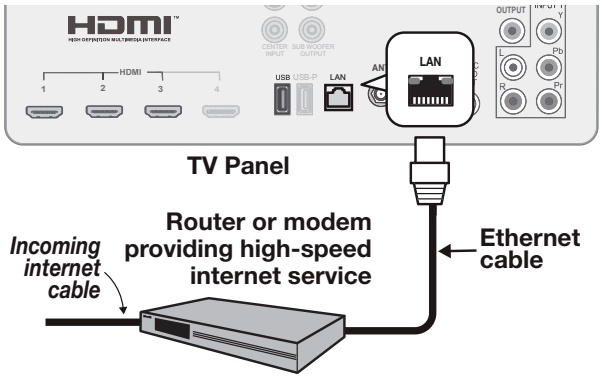
Before using StreamTV Internet media, you must connect the TV to the Internet using either an Ethernet cable or a wireless connection as described here.

**Note:** Make sure the TV is on any input other than *Bluetooth*®. Press the **INPUT** key to change.

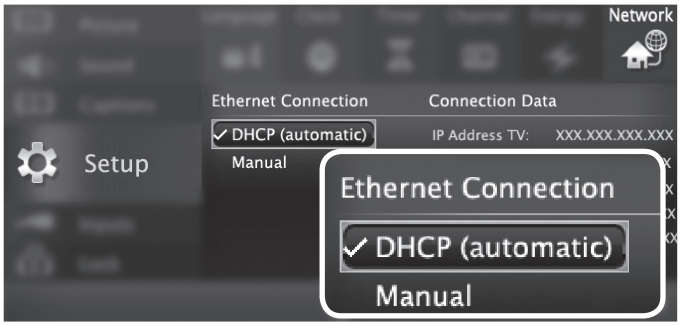
### *Wired Ethernet Connection*

**DHCP (automatic)**

1. Connect the TV to your network router with a Category-5 Ethernet cable (not supplied).




2. Open the ***Setup > Network*** menu to review settings.




*Setup > Network, DHCP connection*

3. Press EXIT to clear the menu.
4. Press the **INTERNET** key on the remote control to begin using this feature.

**Manual**

**Note:** Manual setup is available only for a wired connection.

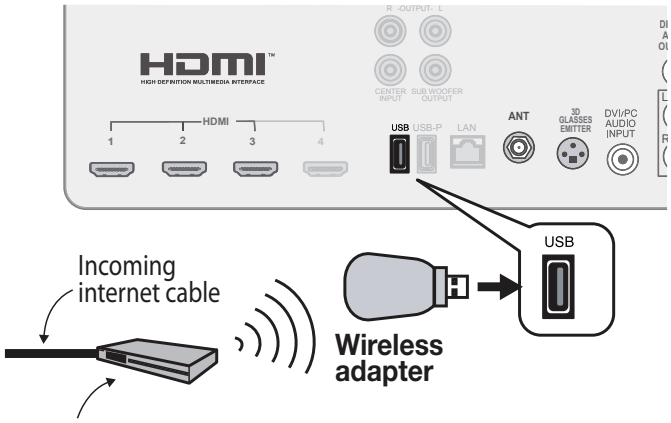
1. Connect the TV to your network router with a Category-5 Ethernet cable (not supplied).
2. In the ***Setup > Network*** menu, highlight **Manual** and press ENTER.
3. Press ▶ to move to the **Connection Data** area.
4. Input the connection data.
5. After entering connection data, press ENTER to connect.
6. Change any of the following if needed:
   - Default Gateway
   - DNS
   - Subnet Mask

## *StreamTV™ Internet, continued*

### *Wireless Connection*

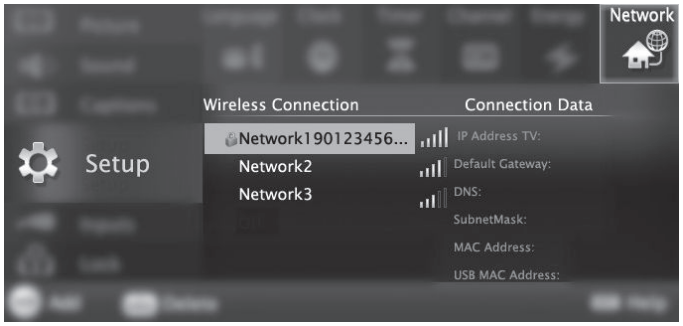
The TV requires an AzureWave AW-NU231 USB wireless adapter to communicate with your IEEE 802.11n-compliant wireless network router. The adapter is available from your Mitsubishi dealer or go to **www.mitsubishi-tv.com and** follow the Accessories link.

1. Disconnect the Ethernet cable if present.
2. Connect the wireless adapter to the TV's USB port.



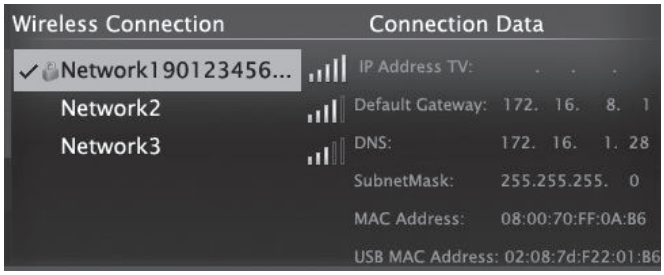

*Connect the USB adapter to the USB port on the back of the TV. Use the left USB port.*

3. Open the ***Setup > Network*** menu. After a few moments, detected networks will appear listed on the screen in order of signal strength.




*Setup > Network menu, wireless connection*

4. Highlight the desired network and press **ENTER** to connect. A check will appear next to the connected network. Press **CH/PAGE** to see more networks if the list fills more than one screen.




*Setup > Network menu after connecting. The active network is checked and connection data displays.*

5. If connecting to a secure network, enter the network key or password when prompted. Special remote control keys you may need:

| Key | Use for |
|---|---|
| 1 | Digit 1 and special characters<br>**! @ # $ % ^ * _ - + = . SPACE ?** |
| **CANCEL** | • Clears the password box of an old entry from a prior session.<br>• Deletes one character during password entry. |
| ▲▼ | Toggle between upper and lower case |

6. Press **ENTER** to connect.

## Using StreamTV Internet Media

1. After establishing the Internet connectivity as described in "Home Network Setup," page 17, switch the TV to any input other than *Bluetooth*®.
2. Press the **INTERNET** key to display services.
3. Press **ENTER** to launch an application.

## Troubleshooting

### If You Are Unable to Connect to the Internet

- Check all power and data connections.
- If you can reach the Internet with a computer or other device on the same Internet service used by the TV, consult the router or modem owner's guide for reset instructions.
- If you cannot reach the Internet, contact your service provider. You may be asked for network information such as the TV's IP address. Go to the ***Setup > Network*** menu to see connection data.

### For Further Assistance

If you are having trouble connecting your TV or accessing the Internet applications, contact Mitsubishi Customer Care at 1 (800) 332-2119.

## *StreamTV™ Internet, continued*

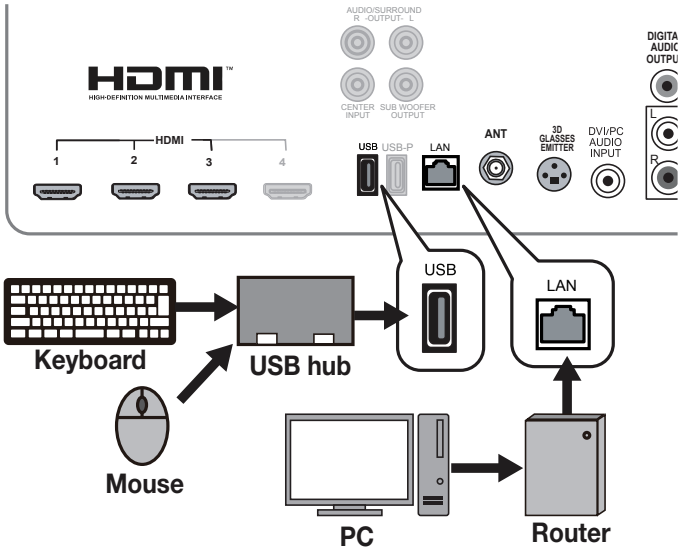
### Remote PC (VNC)

This function allows you to display the PC screen on the TV via a home LAN network.
Even when the PC is installed away from the TV, the TV works as the VNCviewer and you can view and operate the desktop screen of the PC using a keyboard or mouse connected to the USB terminal of the TV.

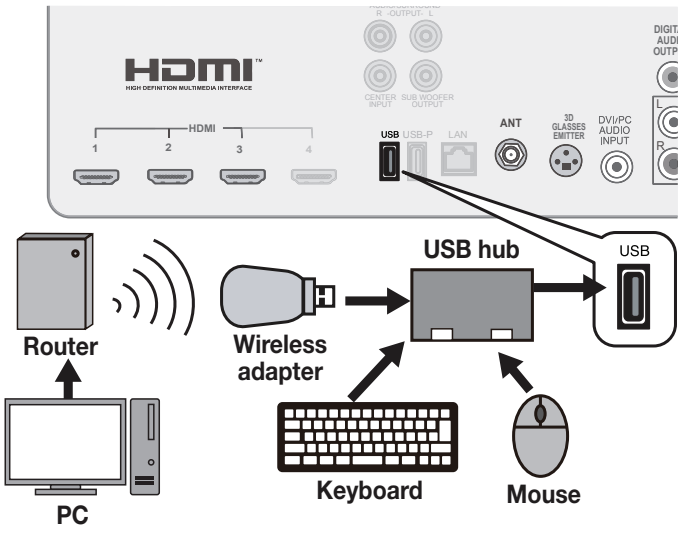
This function is for viewing still image content of the Web browser, e-mail, or other online services. Therefore, moving pictures cannot be played back smoothly with this function.

### Initial Setup

*Wired connection with the VNC PC (server) via the router*




*Wireless connection with the VNC PC (server) via the router*




### Getting started with Remote PC (VNC)

1. After establishing the Internet connectivity as described in “Home Network Setup,” page 17, switch the TV to any input other than *Bluetooth*®.
2. Download the VNCServer software from the URL below and install it on your PC.

   MetaVNC (http://sourceforge.net/projects/metavnc/)
   RealVNC (http://www.realvnc.com/)

   The supported software versions are metavnc-win32 0.6.6 and VNC free edition 4.1.

   VNC provides access to the PC when the VNCServer software available on the Internet is installed on the PC.

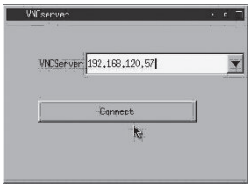
The TV has only one USB port even though multiple devices such as USB wireless dongle, USB keyboard, and mouse are necessary. In order to use these additional devices, connect a USB hub to the USB port on the TV.

**Note:** The product operation is not guaranteed under the following unusual conditions:

- ***a.*** When USB hubs are connected serially.
- ***b.*** When multiple keyboards and mice are connected to the USB hub.
- ***c.*** When multiple USB wireless dongles are connected to the USB hub.

  The USB port on the TV may not work when you connect too many devices.

4. Press the **INTERNET** key to display the menu for selecting VUDU Apps, VUDU Movies, or Remote PC.
5. Press ◀ ▶ to select Remote PC and press the ENTER key.
6. Choose the IP address and type the password in the log-in menu of the VNCviewer.




*Example of the VNC log in menu*

*Example of the VNC password menu*

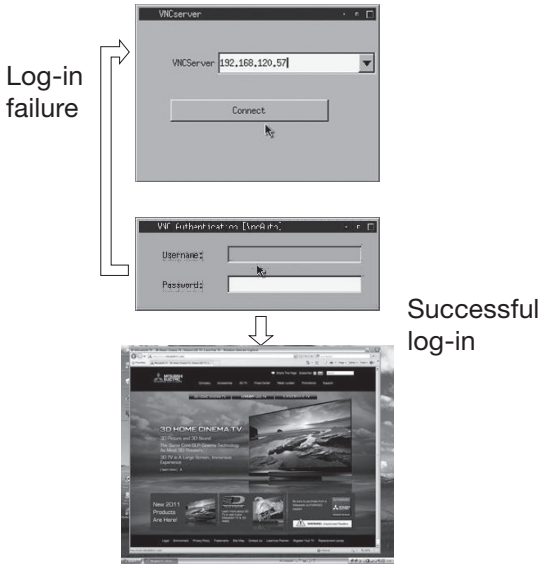
## *StreamTV™ Internet, continued*

**Note:** Each time you use the VNCviewer, you need to select the IP address in the VNC log in menu and type the password using the keyboard and mouse.

Mitsubishi recommends using the password to protect your privacy.

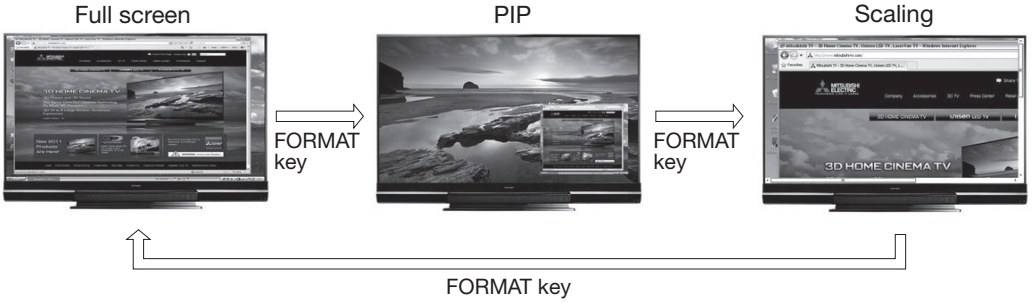
*1.* When you log in successfully, the VNC PC screen is displayed on the entire TV screen. If the log-in fails, the VNC log in menu reappears.

The screen changes as follows:




**Note:**

- When the VNC PC (server) is turned off, the VNCviewer cannot be used.
- The maximum supported resolution is 1980x1080.
- The resolutions of SVGA, XGA, SXGA, UXGA, 720p, and 1080p are supported.
- If the resolution of the desktop screen of the VNC PC is more than 1080p, error message is displayed.
- To select the picture format from full, PIP, and scaling, press the FORMAT key on the remote controller of the TV.



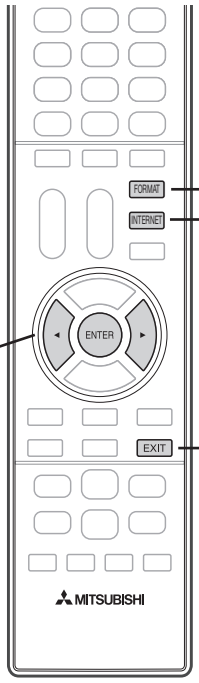
## *StreamTV™ Internet, continued*

### Using Remote PC (VNC) Apps

**Keys for Remote PC applications**

- Key functions vary according to context and may change with newer versions of VNC.

◀ ▶. Selects Remote PC in the StreamTV™ menu. To determine the selection, press the ENTER button.




**FORMAT.** Changes the VNC picture format.

**INTERNET**. Displays the StreamTV™ menu. While the StreamTV™ menu is displayed, this key displays the regular TV screen.

**EXIT.** Exits the VNC and displays the regular TV screen when the StreamTV™ menu or the picture of the VNC PC is displayed. You can completely exit the VNC by pressing this key once.

**Note:**

- After the initial set-up, a message appears on the TV if the access to the VNC fails due to a LAN connection failure. In such a case, reconnect to the Internet.
- Before providing access to the VNC PC (server), turn on the PC (server). In addition, ensure that the VNCServer software is installed.
- You cannot connect to the VNC PC under the following conditions.

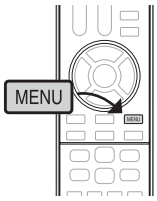
***a.*** Audio is being played with the screen saver displayed.
***b.*** Audio from *Bluetooth*® is being played with the screen saver displayed.
***c.*** 3D is working.
***d.*** Closed caption is working.
When you enable MUTE, the closed caption starts working because its default setting is “On if Mute.” In this case, the VNC picture disappears.
While the closed caption is working, you can select Remote PC in the StreamTV™ menu, however the VNC does not work at all.

- In the 3D mode, you can select Remote PC in the StreamTV™ menu. However the message “Internet service is not available with Device name or 3D” appears.
- While the VNC screen is displayed, you can listen to the audio from the source (TV antenna input, HDMI input, etc.) that you have selected on the TV before using the VNC function.
- The audio from the VNC PC cannot be played back.
- Some USB hubs, wireless keyboards, or mice may not work. Refer to the company website (www.mitsubishi-tv.com) for the recommended equipment.

# 2 TV Menus

## *Main Menu*

Press **MENU** on the remote control to open the main menu.




| | | | |
|---|---|---|---|
| | **Picture** | Picture settings | 22 |
| | **Sound** | Sound settings | 26 |

| | | | |
|---|---|---|---|
| | **Captions** | Closed captions on/and off; caption displays | 28 |
| | **Setup** | Basic TV setup | 29 |
| | **Inputs** | Name assignments for TV inputs, HDMI Control setup | 32 |
| | **Lock** | Setting a pass code and restrictions on TV use. Disabling the control-panel buttons. | 34 |

## *Picture*

Assign a name to the current TV input before making video adjustments (use the ***New Device Found*** or ***Inputs > Name*** menu). Adjustments will be reset to the defaults if you rename the input after making adjustments.

**Picture** › **Video**

Settings in this menu are saved for the current input only. Press ◀ ▶ to make changes and then press **MENU** to return to the menu screen.

To make Video adjustments while watching TV and without using the menu:

1. Press the **VIDEO** key.
2. Press ▲ ▼ to select a video option.
3. Press ◀ ▶ to change the setting.

| | | |
|---|---|---|
| **Picture Mode** | **Brilliant** | For use under bright light; unavailable when the current input is named **Game** or **PC**. |
| | **Game** | Optimizes picture and video processing for gaming consoles. Available only when the name of the input is **Game** or **PC**. |
| | **Bright** | For most daytime viewing |
| | **Natural** | For most nighttime viewing |
| | **ADV1, ADV2** | **Advanced** Picture Modes. Contact your professional installer for setup. See page 24 for an overview. |
| | **842 Series: ISF Day/3D, ISF Night/2D** | |

Set the Picture Mode first before changing other video settings, as some settings are stored independently for each Picture Mode. Use Picture Modes to get the best image under different viewing conditions.

## Picture, continued

| | | | |
|---|---|---|---|
| **Contrast** | | • Low contrast shows a variety of shades in darker images.<br>• In most home lighting situations, medium contrast looks best.<br>• High contrast shows darker images more uniformly black and makes colors appear more vibrant. High contrast is good for brightly lit environments. | Adjusts the white-to-black level. Settings are stored independently for each Picture Mode. |
| **Brightness** | Adjusts overall picture brightness. Settings are stored independently for each Picture Mode. | | |
| **Color** | Adjusts overall color intensity from monochromatic to fully saturated. | | |
| **Tint** | Adjusts the red-to-green ratio. | | |
| **Sharpness** | Adjusts picture detail and clarity. | | |
| **Color Temperature** | **High** | Gives white images a cool cast. May provide the most realistic picture under bright lighting. | Adjusts the white balance. Settings are stored independently for each Picture Mode. |
| | **Low** | Gives white images a warm cast. Natural/ Color Temp at the low setting displays video at approximately the 6500K industry standard for NTSC pictures. | |
| **Video Noise** | **High, Medium, Low, Off** | • **High.** For poor-quality signals.<br>• **Medium.** For moderate noise reduction.<br>• **Low.** For good-quality signals.<br>• **Off.** Leaves the picture unaltered. | Reduces minor noise (graininess) in the picture. |

### Picture › Picture+ (Picture Plus)

| | | |
|---|---|---|
| **Screensaver** | **On, Off** | Select **On** to display a screensaver pattern while playing an audio-only input. To use this feature, the input must either<br>• Be named as an audio source (e.g., **CD, MP3 Player**)<br>**or**<br>• Be the antenna input tuned to an audio-only signal. |
| **Film Mode** | **Auto, Off** | **480i and 1080i signals only.** In **Auto**, the TV automatically detects and applies film-decoding correction to movies filmed at 24 frames per second. Try the **Off** setting if images show many jagged edges. Setting saved by input. |
| **Test Picture** | | Press **ENTER** to display a test picture. Use as a reference picture for high-definition images only. |

### Picture › Reset

- Resets sound and picture adjustments for the current input. Highlight the **Reset** icon and press **ENTER** twice to perform reset.
- **Reset** has no effect on universal settings (**Balance**, **Listen To**, **Language**) or on **Advanced** Picture Mode settings.

## *Picture, continued*

### Picture Perfect

**(PerfectColor, 842 Series)**

| | |
|---|---|
| **PerfectColor Sliders** | Adjusts the saturation (intensity) of six colors for the current image source. |
| **PerfecTint Sliders** | Adjusts six hues for the current image source. |

**Using PerfectColor:**
Highlight the Perfect icon and press **ENTER** to display the ***PerfectColor*** menu. Settings are retained independently for each TV input.

**Using PerfecTint:**

- To switch between PerfectColor™ and PerfecTint™ adjustments, highlight **PerfectColor/PerfecTint** and press ◀ ▶.
- Press ▲ ▼ to move from one color bar to the next.
- Press ◀ ▶ to change settings.
- Press **CANCEL** to restore default settings.
- Press **MENU** to return to the main menu.

### Picture Advanced

***Picture > Advanced*** allows you to save highly customized picture adjustments for each input. **Mitsubishi recommends these adjustments be made only by a trained professional installer.**

1. Press **MENU.** Under **Picture**, highlight the **Advanced** icon and press **ENTER**.
2. With **Picture Mode** (the first option) highlighted, press **ENTER** to change from blank (undefined) to **ADV1** (daytime settings) or **ADV2** (nighttime settings).
3. Use ▲ ▼ to highlight an option you wish to change and press **ENTER** to see the adjustment display.
4. Press ◀ ▶ to change settings.
5. Use ▲ ▼ to navigate to additional options and press ◀ ▶ to change settings.
6. Press **MENU** to return to the ***Picture > Advanced*** menu and save the adjustments for the current input. Press **EXIT** to close the menu.

**Saving Custom 3D Settings**
This menu can be used to create a custom Picture Mode for viewing 3D content. Mitsubishi recommends saving 3D settings under the name **ADV1** and 2D settings under the name **ADV2**.

To create a custom 3D picture mode:

- The TV must be receiving a 3D signal
- One of the TV's 3D Source Formats must be selected
- You must be wearing 3D glasses matched to the emitter in use.

**Locking Custom Picture Mode Settings**
**842 Series.** Once set up, you can protect custom Picture Mode settings with a pass code. With the ***Picture > Advanced*** menu displayed, highlight the Picture Mode name and press keys

7 4 1 5 3 6 9 ENTER.

Once locked, the name of each Picture Mode changes:

**ADV1** is locked as **ISF Day/3D**

**ADV2** is locked as **ISF Night/2D**

Use the same key sequence to unlock the settings and make changes.

**To Use a Custom Picture Mode at a Later Time**

- Press **VIDEO** and use ▲ ▼ to find the Picture Mode option. Press ◀ ▶ to select the desired mode.
- Press **MENU** and go to **Picture > Video > Picture Mode** and select the desired mode.

**To Return to the Default Values for Advanced**

Display the ***Picture > Advanced*** menu and:

1. Highlight the name of the **Advanced** mode to change.
2. Highlight **RESET Pic Mode** and press **ENTER**. You must perform the reset separately for both **ADV1** and **ADV2**.

## *Picture, continued*

**Picture** › **3D Mode**

| | | | |
|---|---|---|---|
| **Source Format** | **Off** | • Overrides the 3D processing of any HDMI 1.4a-compliant 3D signal and displays the signal in 2D instead.<br>• Allows access to some of the 2D picture adjustments that are hidden when the TV's 3D mode is set to **Automatic**. | |
| | **Automatic** | • When the TV receives a 3D signal from an HDMI 1.4a-compliant device or from VUDU 3D, **forces the** TV automatically into 3D mode and selects the correct 3D format.<br>• When the TV receives a normal 2D signal, makes the TV automatically exit 3D mode.<br>• Not effective with checkerboard 3D. Manually select **Checkerboard** or another mode when needed. | |
| | **Side-by-Side**<br>**Top/bottom**<br>**Checkerboard** | • 3D format choices for use with 3D signals that are not HDMI 1.4a compliant.<br>• When the TV receives a 3D signal that is not HDMI 1.4a compliant, you must manually select a 3D format here based on the type of 3D signal being received.<br>• Return the TV to **Automatic** or **Off** at the end of the non-compliant 3D program.<br>• If an HDMI 1.4a compliant signal is received, the TV will automatically override any manual 3D selection. | |
| | **2D+ Depth** | When active, generates a simulated 3D image from an ordinary 2D signal. | |
| **Glasses Emitter Internal** | **Standard, Reverse, Off** | • For use with the TV's internal emitters.<br>• Select the **Off** setting if you notice IR interference with other devices. | Use the **Standard** or **Reverse** setting to synchronizes left/right images to work with your 3D glasses. |
| **Glasses Emitter External** | **Standard, Reverse** | For use with an external emitter connected to the TV's **3D GLASSES EMITTER** jack. | |
| **Depth** | | • Available only when **Source Format** is set to **2D+ Depth**.<br>• Highlight the icon and press **ENTER** to display the adjustment screen.<br>• Allows adjustment of the 3D effect from a flatter image to one with more depth. | |
| **DLP Link** | **Standard, Reverse, Off** | • For use with DLP Link.<br>• Select the **Off** setting if you are not using DLP Link glasses. | Use the **Standard** or **Reverse** setting to synchronizes left/right images to work with your 3D glasses. |

### Notice Concerning Format Compatibility

The Mitsubishi TVs will support the mandatory HDMI 1.4a 3D signals intended for the United States. Specifically, the TVs will support the 3D signals known as Frame Packing 1080p@24 Hz and 720p@60 Hz (primarily from Blu-ray players and gaming consoles), Side-by-Side(Half) 1080p@24/30/60 Hz, 1080i@60 Hz, and 720p@60 Hz, Top-and-Bottom 1080p@24/30/60 Hz and 720p@60 Hz, and Checkerboard 1080p@60 Hz. However, there may be some 3D sources that are not compatible with the TVs. In all cases: (1) 3D sources must connect to the TVs using the HDMI inputs or via StreamTV™ Internet Media; and (2) Active Shutter 3D glasses that match the TV's internal synchronization emitter, or Active Shutter 3D glasses with their own external matching synchronization emitter connected to the rear of the TV or DLP Link Active Shutter 3D glasses are required in order to view 3D content.

## Sound

**Sound** › **Audio**

Settings in this menu are saved for the current input only with the exception of **Balance** and **TV Speakers**, which applies to all inputs. Press ◀ ▶ to make changes and then press **MENU** to return to the menu screen.

To make Audio adjustments while watching TV and without using the menu:

1. Press the **AUDIO** key.
2. Press ▲ ▼ to select an audio option.
3. Press ◀ ▶ to change the setting.

| | | |
|---|---|---|
| **TV Speakers** | **On** | Turns on the internal TV speakers. |
| | **Off** | Turns off the internal TV speakers so you hear sound only from a connected A/V receiver. **Note:** When you disconnect an A/V receiver, be sure to change the **Sound** setting to **TV** to hear sound from the TV speakers. |
| | **Center** | **842 Series.** Makes the TV's speaker array act as a center channel. See "Using the TV Speakers as a Center Channel," page 16. **Notes:** • When **Center** is active, the subwoofer output is muted even if set to **On**. • To de-activate the center channel, change **TV Speakers** to **On** or **Off**. |
| **Center** | **[Center channel level adjustment]** | **842 Series.** Adjusts the volume level of the TV speaker array when used as a center channel. **Note:** Set ***TV Speakers*** to **Center** to make this adjustment available. |
| **Bass** | Controls volume of low-pitched sound from the TV speakers. | |
| **Subwoofer** | **[Subwoofer level adjustment]** | **842 Series.** Adjusts the volume level of a connected subwoofer. **Note:** Set ***Sound > Global > Subwoofer*** to **On** to make this adjustment available. |
| **Treble** | Controls volume of high-pitched sound from the TV speakers. | |
| **Balance** | Controls audio balance between the right and left TV speakers. | |
| **Sound Mode** | **Stereo** | No special audio effects from the TV speakers. |
| | **Surround** | Modifies audio from the TV speakers. • For monaural (non-stereo) programs, creates a simulated stereo effect. • For stereo programs, creates a simulated surround sound effect. • The TV's speaker array plays surround sound if available. |
| | **Music** | **842 Series.** Optimizes the TV's speaker array for music listening. |
| | **Night** | **842 Series.** Focuses the TV's speaker array to a single point to limit sound heard by others outside the room. Press **ENTER** to adjust the focal point (**Night Angle**). |
| **Level Sound** | **On, Off** | Reduces differences in sound volume between programming segments, such as the difference between regular broadcast programs and commercial segments. |
| **Listen To** (applies only to analog channels from the **ANT** input) | **Stereo** | The TV plays stereo broadcasts in stereo and mono broadcasts in mono. The word **Stereo** is displayed when you tune to a channel broadcasting in stereo. |
| | **Mono** | Reduces background noise. Use when receiving a weak stereo audio signal. All audio is played as mono. |
| | **SAP** (Second Audio Program) | Selects an additional monaural sound track not audible during normal TV viewing. The SAP signal might be related to the program (such as a sound track in a foreign language), or it might be unrelated (such as a weather report). If an SAP signal is broadcast, the letters **SAP** are displayed when you tune to the channel. |

## Sound, continued

**Sound › Global**

**842 Series.** These settings affect audio from the **AUDIO/SURROUND OUTPUT** jacks.

| | | |
|---|---|---|
| **Analog Audio Out** | **Fixed** | Use with an analog A/V receiver. Control volume from the A/V receiver. The volume of the audio output signal is fixed and is unaffected by the TV's volume control. |
| | **Variable** | Use with headphones. Adjust headphone volume using the TV's volume controls. When set to **Variable**, the audio output signal is adjustable from the TV's volume controls. |
| | **Rear** | Sends left and right rear audio to external speakers. Use when supplementing the TV's speaker array with external rear speakers. See "External Rear Speakers," page 15. |
| **Subwoofer** | Select **On** to turn on audio to a connected subwoofer. Set to **Off** if no subwoofer is connected. | |

**Sound › Auto SP**

**842 Series.** Performs auto calibration of the Sound Projector speaker array. Use of this menu is explained in the Basic Owner's Guide supplied with the television.

**Sound › SoundPro**

**842 Series.** Lets you set up the Sound Projector speaker array manually. Use of this menu is explained in the Basic Owner's Guide supplied with the television.

## Captions

### Captions on Digital Channels

The TV can decode captions from the **ANT** input only. Broadcasters can send up to six different captioning selections or can send analog captions for a program that originated in analog format. A TV station may broadcast only one or two types of captions or none at all.

### Captions on Analog Channels

The TV can decode captions from the **ANT** input and the composite **VIDEO** jacks. Broadcasters can send either standard closed captions or text service. Standard closed captions follow the dialogue of the program and display in a small section of the screen. Text-service closed captions often contain information such as weather or news and cover a large portion of the screen.

***IMPORTANT***

- **Analog text-service options display a large black or gray box on the screen when no caption signal is being broadcast.**
- **The content of captions is determined by the broadcaster. If captions show strange characters, misspellings, or odd grammar, it is not a malfunction of the TV.**
- **Closed-caption signals are not available through HDMI or component jacks. See the menus for devices connected to these inputs for closed-caption decoding.**

### Captions › Services

| | | |
|---|---|---|
| **Service** | **On if Mute, On, Off** | **On if Mute:** Displays digital closed-caption signal Caption 1 (digital) or CC1 (analog) when audio from the TV speakers is muted. While watching TV, press **MUTE** to turn closed captions on/off. |
| **Digital** | **Caption 1–Caption 6** | Caption signals sent by the broadcaster. |
| **Analog** | **CC 1–CC 4**<br>**Text 1–Text 4** | • **CC 1–CC 4.** Standard closed-caption signals<br>• **Text 1–Text 4.** Text-service signals |

### Captions › Font

These choices apply to digital captions only.

| | | |
|---|---|---|
| **Style** | **As Broadcast** or choice of font styles (digital captions only) | **As Broadcast** changes settings to those selected by the captions provider, or, if none, to the TV's own caption defaults. Use one of the font styles to give digital captions a custom appearance. |
| **Size** | **Large, Standard, Small** | **Large** is recommended. |

### Captions › Color

| | | |
|---|---|---|
| **Font** | **White, Black, Magenta, etc.** | Recommendations for digital captions:<br>• **A white font on a black translucent background makes an easy-to-read combination.**<br>• Use contrasting colors for captions and background. |
| **Opacity** | **Translucent, Opaque, Flashing, Transparent** | |
| **Background Color** | **White, Black, Magenta, etc.** | |
| **Background Opacity** | **Translucent, Opaque, Flashing, Transparent** | |

## Setup

### Setup › Language

| | | |
|---|---|---|
| **Menu** | **English**<br>**Spanish** | Displays on-screen menus in either English or Spanish. |
| **Antenna Digital Audio** | Selects the current language for a digital program from the **ANT** input. A digital program may include up to seven language choices or no language choice. | |

### Setup › Clock

Set the TV clock to:

- Use the TV Timer to power on the TV automatically at a time you specify
- Lock the TV by time

**Note:**

- When the Daylight Saving Time change occurs, you must open this menu and set the TV's clock ahead or back.
- You must reset the TV's clock after an interruption of power such as unplugging the TV's power cord.

| | | |
|---|---|---|
| **Time**<br>**Date** | Highlight the Clock icon and press **ENTER** or ▼ to highlight the time. To edit time and date:<br>• Press **ENTER** to select the item to change.<br>• Press ▲ ▼ to change values. Press **ENTER** to confirm entries.<br>• Press ◀ ▶ to move to another column. | |
| **Time Zone** | **Eastern, Central, Mountain, Pacific,** etc. | |
| **Daylight Savings** | **Off, On** | Select the setting for your area. |

### Setup › Timer

The Timer tells the TV to power on automatically at a time you set. Use this menu to set a day, time, input, and channel for the Timer. If the TV is already on at the set time, the TV will automatically change to the designated channel or input.

- The TV clock must be set before you can use the Timer feature.
- As a reminder that the TV Timer is set, the TV **POWER** indicator flashes slowly while the TV is powered off.
- When the Timer turns on the TV, press any key on the remote control to keep it from turning off after five minutes.

| | | |
|---|---|---|
| **Timer** | **On, Off** | Select **On** to enable the Timer. |
| **Day** | **Daily**, **Mon-Fri**, (every) **Sunday**, (every) **Monday**, (every) **Tuesday**, etc. | Select the day or days of the week for the Timer to turn on the TV. |
| **Time** | To set the time for the TV to come on:<br>**1.** Highlighted the time and press **ENTER**.<br>**2.** Press ▲ ▼ to change values. Press **ENTER** to confirm entries. | |
| **Input** | **Ant, DVD, VCR,** etc.<br>Select the input you want displayed when the TV comes on. Choose from the defined and enabled inputs that appear in the ***Input Selection*** menu. | |
| **Channel** | If the source is the **ANT** input, press ▲ ▼ to select a channel number or press and hold to scroll quickly. | |

## Setup, continued

**Setup** › **Channel**

**Ant Air, Ant Cable**

**All Channels, Add only new channels**

**Scan**

**You must perform a channel scan to receive digital channels.** The scan searches for broadcast channels and adds them to TV memory. To start channel scan:

1. Highlight one of the input selections based on your connection to the **ANT input**:
   - **Air** when connected to an indoor or outdoor antenna.
   - **Cable** when connected to direct cable (no cable box).
2. Select the scan type.
   - Select **All Channels** for an initial scan or after moving the TV to an new area with a different channel line-up.
   - Select **Add only new channels** to search for channels newly broadcasting since the previous scan.
3. Press ▶ to highlight **SCAN.**
4. Press **ENTER** to start channel memorization.

See below for additional notes on Scan.

**Edit**

After channel scan, **Edit** lets you add and delete memorized channels. Memorized channels are those you can tune using the **CH** key. Edit the channel list to limit tuning to channels you watch.

- Press **CH/PAGE** to jump to the next or previous page of channel numbers.
- Press ▲▼◀ ▶ to move through all channel numbers, one at a time.

### Adding/Deleting Channels Using the Channel Edit Menu

- Channels marked with a check are in memory.
- To add or delete a channel from memory, highlight the channel number and press **ENTER**.
- To add a single digital channel not in the list, see the notes under **Scan** on this page.
- Digital channels are listed by virtual channel number with the physical channel number shown in small gray text.

- **Virtual Channel Number** (digital channels only). A channel number sent by a local broadcaster.
- **Physical Digital Channel Number.** The channel number officially assigned to the actual broadcast frequency; shown on screen in gray text.

### Notes on Scan and Channel Memorization

- Channel memorization may take up to 15 minutes to complete.
- To stop channel memorization before completion, press **CANCEL**. Channels already added are retained.
- When watching TV, press **CH** to move through memorized channels. Press and hold **CH** to speed through channels.
- To add a digital channel that does not appear in the ***Edit*** menu without performing channel memorization:
  1. Look up the physical channel number for the new digital channel. See the website **www.antennaweb.org** for help.
  2. Press **INPUT** and select the **ANT** input.
  3. Use the number and **CANCEL** keys to enter the physical channel number followed by "-1" and **ENTER**. For example, for physical channel 36,

     3 6 CANCEL 1 ENTER.

     The TV will search for a digital channel on the channel 36 frequency. When it finds the channel, it will:
     a. Add the channel to memory.
     b. Change the channel number to the virtual channel number sent by the broadcaster.
     c. Add to memory any associated sub-channels.
- Rememorize channels if you move the TV to a different geographic area with a different channel line-up.

## Setup, continued

**Setup** › **Energy**

| | | |
|---|---|---|
| **Lamp Energy** | **Standard, Bright** | **Standard** is for most viewing conditions. Use **Bright** in brightly lit rooms. You may notice increased fan noise when using the **Bright** setting. |

**Setup** › **Network**

Use of this menu is explained in the Basic Owner's Guide supplied with the television.

| | | |
|---|---|---|
| **Ethernet Connection** | **DHCP (automatic), Manual** | This option is available only when an Ethernet cable is connected to the TV's LAN jack. |
| | **[Connection Data]** | |
| **Wireless Connection** | **[Network ID]** | This option is available only when optional wireless adapter AzureWave AW-NU231 is plugged into the TV's USB jack.<br>**842 Series.** The wireless adapter must be used with the left USB jack and not the **USB-P** jack. |
| | **[Connection Data]** | |
| | **Off**. Turns off the TV's wireless system radio receiver. Use this option if there is RF interference with other devices. | |

## Inputs

**Inputs** › **Name**

| | |
|---|---|
| **INPUT** and **HDMI** jacks:<br>**Cable box, Cam(corder), CD, DVD (DVD, DVD2, Blu-ray), DVR, Game (Game, PS, Xbox, Wii), Media Box, PC, Satellite, AVR, On/Off** (**ANT** only)<br><br>**INPUT** jacks only:<br>**CD/Audio, MP3 Player, VCR**<br><br>**HDMI** jacks only:<br>**PC, AVR, Delete** | • Lets you assign or change the names of inputs appearing in the ***Input Selection*** menu. Highlight an input and press **ENTER** multiple times to cycle through the name choices.<br>• Lets you turn the **Ant** input **On**/**Off** to display or hide it in the ***Input Selection*** menu; highlight the input and press **ENTER** to switch between **On** and **Off**.<br>• **842 Series.** Lets you turn the **Bluetooth** input **On**/**Off** to display or hide it in the ***Input Selection*** menu; highlight the input and press **ENTER** to switch between **On** and **Off**.<br>• Lets you delete unused HDMI inputs from the ***Input Selection*** menu.<br>• A CEC-enabled tuner can be named either **Cable Box** or **Satellite**.<br>• A CEC-enabled DVD player can be named **DVD**, **DVD2**, or **Blu-ray.** |

**General Notes for the Inputs > Name Menu**

When you change an input name and then exit the ***Name*** menu:

- The name is changed
- The icon in the ***Input Selection*** menu is changed
- Audio and video settings are changed to the defaults for the new device type.

**Notes for HDMI devices**

- **Disconnecting an HDMI device:** When you disconnect an HDMI device, the icon remains in the ***Input Selection*** menu until you remove it. Select **Delete** in the ***Inputs > Name*** menu to remove an unwanted icon for an HDMI input.
- **HDMI Control and CEC-Enabled Devices:** See “HDMI Control of CEC Devices” on page 38.
- **In case of CEC conflicts:** Turn off CEC signals in one of these ways:
  - Turn off the TV’s HDMI Control signals to the device (***Inputs > HDMI Control*** menu).
  - Turn off each device’s internal CEC capability.

  See “HDMI Control of CEC Devices” on page 38 for the TV’s HDMI Control or, to turn on/off a specific device’s response to CEC signals, see the device owner’s manual.
- If the ***New Device Found*** screen does not display as expected when you connect an HDMI device:
  ***a.*** Power off the device.
  ***b.*** Disconnect the HDMI cable.
  ***c.*** Press **MENU** on the TV remote control to enter the TV main menu.
  ***d.*** Go to ***Inputs > Name***.
  ***e.*** Highlight the HDMI input name and press **ENTER** to select **Delete**.
  ***f.*** Press **EXIT** to clear the menus.
  ***g.*** Connect the new device and the ***New Device Found*** screen will display.

## Inputs, continued

**Inputs** › **HDMI Control** › **On, Off**

Select **On** or **Off** to enable or disable the TV's control of a CEC-enabled device. See "Enabling HDMI Control of CEC Devices" on page 38 for use of this feature.

**Note:** When **HDMI Control** is set to **Off** the TV may still respond to CEC commands sent by another device. To prevent this, turn off HDMI Control in the device using the device's own menus.

**Inputs** › **Order**

Lets you rearrange icons in the ***Input Selection*** menu.

1. Press ▲▼◀ ▶ to highlight an input icon.
2. Press **ENTER** to confirm the selection.
3. Press ▲▼◀ ▶ to drag the icon to the desired position.
4. Press **ENTER** to confirm the new position.

**Inputs** › **StreamTV**

**Internet Services** Highlight **the service name** and press **ENTER** to purge your account **Deactivation** information stored in the TV.

**Inputs** › **Demo**

See demonstrations showcasing selected TV features.

**Inputs** › **Update**

Provides instructions for updating TV software.

# Lock

## TV Locks

| | |
|---|---|
| **Parental** | ***Lock by Program Ratings***<br>Restricts access using U.S.-based ratings sent by broadcasters. |
| **Time** | ***Lock by Time***<br>Restricts TV use by time of day. |
| **Channel** | ***Lock by Channel***<br>Blocks access to the channels you specify. |
| **Panel** | ***Lock Control Panel***<br>Disables the buttons on the TV's control panel. Use this feature if small children in the home try to press buttons on the control panel. |
| **Other** | ***Lock by Other Program Ratings***<br>Restricts access using possible future ratings that may be sent by broadcasters. |

## Pass Code

### *Setting a Pass Code*

You are prompted to enter a pass code whenever you select **Lock** on the main menu. To set a pass code for the first time:

1. Press **MENU** and highlight **Lock**. A screen prompting you for a pass code will display.
2. Input a four-digit pass code using the number keys on the remote control.
   - Press **CANCEL** to delete a number and move back one space.
   - Press **MENU** or **EXIT** to close the menu without setting a pass code.
3. Enter the code a second time to confirm.

### *Resetting a Pass Code*

See the procedure in "Bypassing TV Locks" on page 35.

## Parental Menu

The TV comes from the factory with the rating locks turned off and with pre-set U.S. ratings TV-PG and movie rating PG. You must turn on blocking for U.S. ratings to activate these rating restrictions. Use the ***Lock*** > ***Parental*** menu to change the level of blocking with U.S. ratings.

Any time you change the channel or device, it may take up to five seconds for the rating restrictions to take effect.

## Other Menu (Alternate Rating System)

This TV can recognize new rating systems that may come into effect in the future. The ***Other*** menu allows you to block digital programming when such systems come into effect. The **Start Time** and **Stop Time** options in the ***Parental*** menu apply to U.S.-based ratings only and do not affect alternate rating systems.

The first time you tune to a channel broadcasting an alternate rating system, the TV defaults to the most restrictive setting if the ***Lock*** menu > ***Other*** **Lock** option is set to **On**. Use this menu to change the allowed rating if you are unable to watch a program rated with an alternate system.

***Important Notes on Rating Locks***

- ***Parental*** menu rating locks apply only to channels and signals received on the **ANT** and composite **VIDEO** jacks.
- ***Other*** menu rating locks apply only to digital channels received on **ANT**.
- When viewing a cable box, satellite receiver, or other device connected to the component **Y Pb Pr** or **HDMI** inputs, check the device's owner's guide for parental locks.

## *Lock, continued*

### Using TV Locks

After you set the lock, you must use your pass code to:

- View a locked program
- View a locked channel
- View the locked TV
- Cancel the lock
- Open the ***Lock*** menus

#### *Tips for Using the Lock Menu*

When entering the ***Lock*** menu, you will be prompted to enter a pass code.

- To change the pass code, press **9** and **LAST** at the same time. Either enter a new pass code to open the ***Lock*** menu and make changes or press **EXIT** to close the menu.
- If any of the locks are turned on and you exit the menus when prompted for a new code, the old code and all lock settings will be retained.
- If all locks are turned off and you exit the menus when prompted for a new code, then the previous code will be erased.

#### *Bypassing TV Locks*

- If you try to watch a blocked program or channel or the TV is locked by time, a notice will appear prompting you for a pass code. To use the TV, input your four-digit pass code and press **ENTER**.
- If a program is blocked, you can still use the TV without entering a pass code. Change to a channel airing an allowed program or change to another device.
- If you forget your pass code, you can view the locked TV without entering your pass code. When prompted for the pass code, press **9** and **LAST** keys on the TV remote control at the same time. This process temporarily unlocks the TV.

***IMPORTANT***

**When changing or deleting your pass code, you must use the remote control included with this TV. You cannot use a Mitsubishi remote control from another component or a "universal" remote.**

## Lock, continued

**Lock Parental**

**Lock**

Disables or enables blocking based on V-Chip signals and the U.S. rating system.

**TV Rating**

Highlight the rating level you wish to change and press **ENTER** to block it ( ) or allow it ( ).
You can apply supplemental content blocking to the age-based ratings by using the TV content categories. (**FV, D, L, S, V**)

**Movie Rating**

Highlight the rating level you wish to change and press **ENTER** to block it ( ) or allow it ( ).

**Start Time/ Stop Time**

Sets the time of day for enforcement of rating restrictions chosen in the ***Parental*** menu. The TV clock must be set in the ***Setup > Clock*** menu before you can use **Start Time/Stop Time**. To make rating restrictions active 24 hours a day, set **Start Time** and **Stop Time** the same.

1. Highlight the start time or stop time.
2. Press **ENTER** to start editing.
3. Press ▲ ▼ to make changes.
4. Press **ENTER** to confirm changes.

**TV Program Ratings**

| | | |
|---|---|---|
| TV Age-Based Ratings | **TV-Y** | **Youth.** For children under 7. |
| | **TV-Y7** | **Youth 7** and older. |
| | **TV-G** | **General Audience.** For the entire family. |
| | **TV-PG** | **Parental Guidance.** Parental Guidance recommended; may not be suitable for some children. |
| | **TV-14** | **Adolescent 14 and older.** Not recommended for children under 14. |
| | **TV-MA** | **Mature Audience.** For adults only. |
| TV Content Categories | **FV** | **Fantasy Violence.** Applies to TV-Y7 only. |
| | **D** | **Sexual Dialog**. Applies in differing degrees to TV-PG and TV-14. |
| | **L** | **Adult Language.** Applies in differing degrees to TV-PG, TV-14, and TV-MA. |
| | **S** | **Sexual Situations.** Applies in differing degrees to TV-PG, TV-14, and TV-MA. |
| | **V** | **Violence** (graphic or realistic). Applies in differing degrees to TV-PG, TV-14, and TV-MA. |

**Movie Ratings**

| | |
|---|---|
| **G** | **General Audience.** Designed for the entire family. |
| **PG** | **Parental Guidance.** Parental Guidance recommended; may not be suitable for some children. |
| **PG-13** | **Parental Guidance, 13 and Older.** Not recommended for children under 13. |
| **R** | **Restricted.** Restricted in theaters to 17 years old and older unless accompanied by an adult. |
| **NC-17** | **No Children 17 or Under.** Restricted in theaters to 18 years old and older. |
| **X** | **Adult.** Designed for and restricted in theaters to adult audiences only. |
| **Not Rated** | No MPAA rating assigned. |

## Lock, continued

### Lock › Time

Blocks all use of the TV during the time period you specify. You must enter a pass code to use the TV when the time lock is in effect.

**Lock by Time** — Enables/disables **Lock by Time**.

**Lock Time, Unlock Time** — To set the lock and unlock times:

1. Highlight the lock or unlock time.
2. Press **ENTER** to start editing.
3. Press ▲▼ to make changes.
4. Press **ENTER** to confirm changes.

**Note:** To make Lock by Time active 24 hours a day, set **Start Time** and **Stop Time** the same.

### Lock › Channel

The ***Channel Lock*** menu lists channels currently in memory (see page 30). Highlight a channel and press **ENTER** to lock ( ) or allow ( ) the channel. Channels locks will be cleared the next time you perform a channel scan.

### Lock › Panel

**Off, On** — **On** locks and **Off** unlocks the buttons on the TV's control panel. Use this option if small children try to press TV buttons.

- To release the Panel Lock from the TV's control panel, press and hold the **INPUT** button for ten seconds. If the TV is powered off, press **POWER** after the lock releases to make the TV power on.
- To reactivate the lock, return to this menu and change the setting to **On**.

### Lock › Other

**Other Menu Options (alternate rating system)**

This TV can recognize new rating systems that may come into effect in the future. Such alternate rating systems will apply only to digital programming received on the **ANT** input.

| | | |
|---|---|---|
| **Lock** | **On, Off** | Enables/disables program blocking. |
| **System** | The rating system available for the channel. | |
| **Group** | Rating groups available in the rating system shown on the screen. Rating groups are defined by the rating system in effect. | |
| **Rating** | Rating restrictions available in the selected rating system and group. Highlight the rating and press **ENTER** to check (block) or uncheck (allow) rated content. | |

# 3 HDMI Control of CEC Devices

Many newer HDMI devices have a feature called Consumer Electronics Control (CEC) or HDMI Control. HDMI Control allows one device, such as the TV, to control other devices, such as an A/V receiver or disc player. Use of CEC is optional.

Each manufacturer chooses which CEC functions to support so it is difficult to predict which devices and features are compatible with Mitsubishi's HDMI Control. You may find that CEC functions for a specific device are limited.

**To use HDMI Control, you must enable it in both the TV and the device.**

- **In the TV.** Enable HDMI control from the ***New Device Found*** screen or from the ***Inputs > HDMI Control*** menu.
- **In the Device.** Most devices with HDMI CEC compatibility let you turn it on or off in the device menus, where it is typically listed as "HDMI Control."

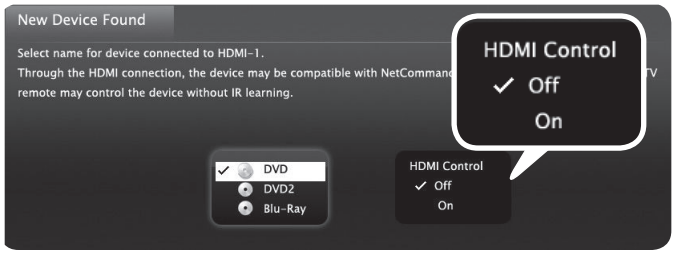
## *Enabling HDMI Control of CEC Devices*

To ensure proper detection

- Power on HDMI devices before connecting them to the TV.
- Connect and set up HDMI devices one at a time.

1. Power on the device and allow it to complete the power-on sequence (boot up). Stop any playback.
2. Connect the device to one of the TV's HDMI inputs.
3. When the TV detects the connection, the ***New Device Found*** screen will appear.

**Note:** See "If the New Device Found Screen Has No HDMI Control Option" on this page if an HDMI Control option is not offered.




*New Device Found screen with HDMI Control option. This screen displays only if the device's HDMI Control is enabled.*

4. If prompted for a name, highlight a name for the device and press **ENTER** to add a check. The device itself may later override the name you assign.

5. Highlight **On** and press **ENTER** to add a check.

6. Press **EXIT** to close the ***New Device Found*** screen.

**Note:** At any time after completing Auto Input Sensing, you can set the TV's HDMI control on or off in the ***Inputs > HDMI*** Control menu.

### If the *New Device Found* Screen Has No HDMI Control Option

If the ***New Device Found*** screen shows no option for HDMI Control, one of these conditions applies:

- **HDMI Control is turned off in the menus of the new device**

  **Action:**
  - ***a.*** Press **EXIT** to close the ***New Device Found*** screen.
  - ***b.*** Display the device's setup menus and enable the device's CEC capabilities.
  - ***c.*** Wait for the TV's ***New Device Found*** screen to appear again.
  - ***d.*** If the ***New Device Found*** screen does not appear, power off the device. Power on the device and wait for the ***New Device Found*** screen to display with the HDMI Control option.
- **The HDMI cable cannot support CEC**

  **Action:**
  Upgrade your HDMI cable to one that supports CEC.
- **The device does not have CEC compatibility**

  **Action:**
  Control the device with its own remote control or program the TV's remote control to operate the device.

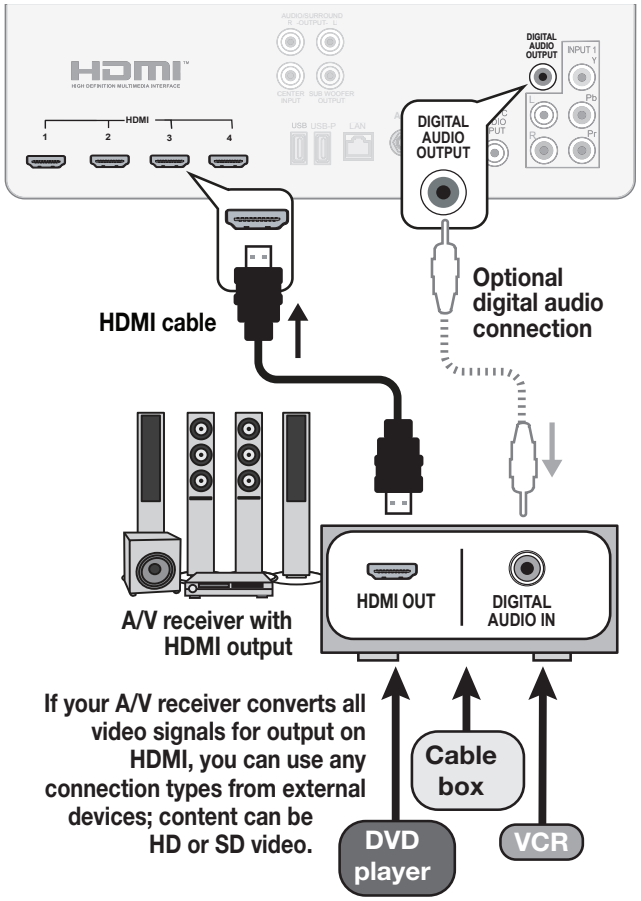
## HDMI Control of an HDMI A/V Receiver and Connected Devices

1. Enable HDMI Control for the A/V receiver as described in "Enabling HDMI Control of CEC Devices" on the previous page.
2. Power on the HDMI device you wish to connect to the A/V receiver (such as a disc player, cable box, or satellite receiver). Allow the device to complete the power-on sequence (boot up). Stop playback if the device starts playing.
3. Select the device's HDMI input on the A/V receiver's front panel controls or remote control.
4. Connect the device to the A/V receiver with an HDMI cable.
5. When the TV detects the connection, the ***New Device Found*** screen will appear.

**Note:** If the TV is unable to detect the device, either the device's CEC capability is not enabled or the device is not CEC compatible. Enable HDMI control through the device's menus before continuing. You may need to temporarily connect the device directly to the TV to view device menus.

6. Highlight **On** and press **ENTER** to add a check.

7. Highlight **EXIT** and press **ENTER** to close the ***New Device Found*** screen.
8. Optional: Connect the TV's **DIGITAL AUDIO OUTPUT** to an input on the A/V receiver. Use this additional connection if:
   - You want the ability to switch between the A/V receiver speakers and the TV speakers.
   - You want to use the A/V receiver to listen to devices connected to the TV only, e.g., an antenna input or camcorder.


DIGITAL AUDIO OUTPUT
HDMI cable
Optional digital audio connection
HDMI OUT
DIGITAL AUDIO IN
A/V receiver with HDMI output
If your A/V receiver converts all video signals for output on HDMI, you can use any connection types from external devices; content can be HD or SD video.
Cable box
DVD player
VCR

*Connecting HDMI devices. The optional digital audio connection allows you to hear audio through the A/V receiver from devices connected to the TV only.*

*To hear audio from a device without HDMI Control, you must manually select the correct A/V receiver input for the device.*

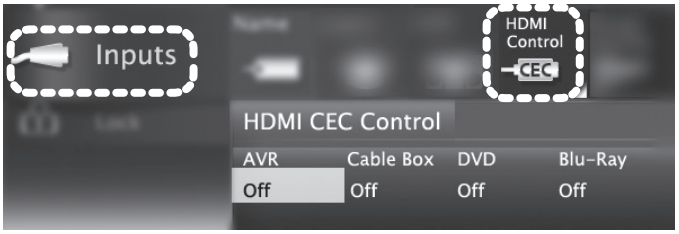
## Resolving CEC Conflicts

Because each manufacturer selects which CEC functions to support, some devices may conflict with other devices. If control conflicts arise, you can:

- Turn off TV control of an individual CEC-enabled device (see below).
- Turn off CEC in the device itself. Refer to the device's Owner's Guide for instructions.

### Turning Off the TV's HDMI Control of a CEC Device

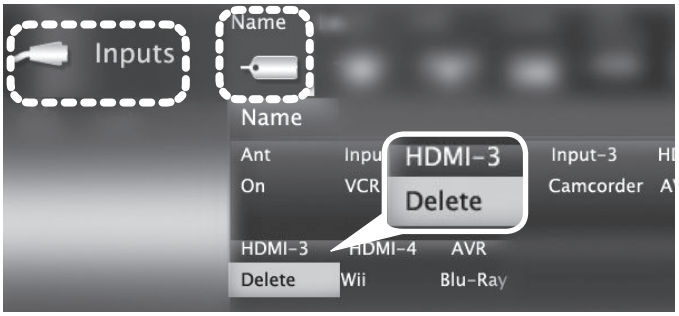
1. Press **MENU** on the TV remote control.
2. Highlight ***Inputs > HDMI Control***.
3. Move to the device name and press **ENTER** to select **Off** to turn off the TV's ability to control the device.
4. Press **EXIT** to clear the menu.




*Inputs > HDMI Control menu*

## Removing an HDMI Device

1. Power off the device.
2. Disconnect the HDMI cable.
3. Press **MENU** on the TV remote control to enter the TV main menu.
4. Go to ***Inputs > Name***.
5. Highlight the HDMI input name and press **ENTER** to select **Delete**.
6. Press **EXIT** to clear the menus.




*Inputs > Name menu with **Delete** selected for HDMI-3.*

## Using HDMI Control

As an example of using HDMI Control, press **PLAY** on the device itself to:

- Power on the TV
- Switch to the device (no need to display the ***Input Selection*** menu)
- Begin play of the device

### Direct Keys

Test your equipment with the TV's remote control to find additional supported commands. See the table below for commands that may be available, depending on the individual device.

**CEC-enabled VCR, DVD, and DVR functions that may be available:**

| Record/ Playback | Menu Navigation | Channel Tuning | Other |
|---|---|---|---|
| ▷ ❚❚ | ◀ ▶ ▲ ▼ | **CH** | **GUIDE** |
| ● ■ | **ENTER** | Digits **0–9**, **CANCEL** | **TOOLS** Check the ***TOOLS*** menu for supported functions. |
| ◀◀ ▶▶ | **CANCEL** (to cancel) | **ENTER** | |

If you have a CEC-enabled A/V receiver, CEC-enabled devices connected to the A/V receiver with an HDMI cable may also be controllable. They can be selected from the TV's ***Input Selection*** menu.

**CEC-enabled A/V receiver functions.** Try the **VOL**, **MUTE**, and menu-navigation keys.

# Appendix A: TV Care

## Cleaning Recommendations

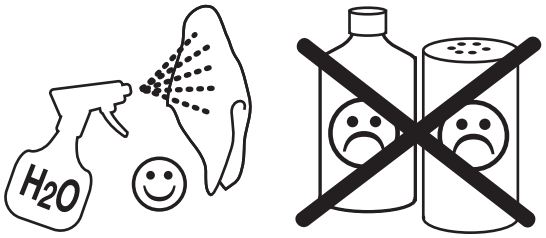
Normally, light dusting with a dry, non-scratching duster will keep your TV clean. If cleaning beyond this is needed, please use the following guidelines:

First, turn off the TV and unplug the power cord from the power outlet.

Occasionally clean dust build-up from the air-intake grilles on the back and sides of the TV. Clean using a vacuum cleaner with a brush attachment.

### *Top and Sides of the TV*

- Gently wipe down your TV with a soft, non-abrasive cloth such as cotton flannel or microfiber, or a clean cloth diaper, lightly moistened with water. Dry with a second dry, soft, non-abrasive cloth.
- For oily dirt, add a few drops of mild liquid detergent, such as dishwashing detergent, to the water used to moisten the cloth. Rinse with a second cloth moistened only with water. Dry with a third dry, soft, non-abrasive cloth.




### *Screen*

- Follow the instructions for the top and sides, wiping gently in an up and down motion.
- Clean the entire screen evenly, not just sections of the screen.
- Do not allow liquid to drip down the screen, as some liquid may enter the TV through the gap between the screen and screen frame.
- You may purchase Mitsubishi Screen Cleaner, part number CLEANER-VSS, by calling (800) 553-7278.

### *General Cleaning Precautions*

- DO NOT allow liquid to enter the TV through the ventilation slots or any crevice.
- DO NOT use any strong or abrasive cleaners, as these can scratch the surfaces.
- DO NOT use any cleaners containing ammonia, bleach, alcohol, benzene, or thinners, as these can dull the surfaces.
- DO NOT spray liquids or cleaners directly on the TV's surfaces.
- DO NOT scrub or rub the TV harshly. Wipe it gently.

## Care of the Remote Control

### Remote Control Tips

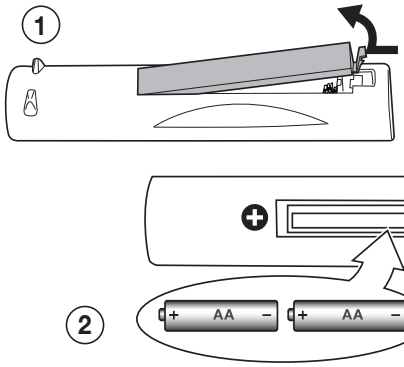
- For longer life, use alkaline batteries.
- Do not mix old and new batteries.
- Be within 20 feet of the equipment.
- Do not press two or more keys at the same time unless instructed to do so.
- Do not allow the unit to get wet or become heated.
- Keep the unit out of direct sunlight.
- Avoid dropping on hard surfaces.
- Do not use harsh chemicals to clean. Use only a soft, lightly moistened cloth.

### *Low-Battery Indicator*

If you press a key and the mode indicator blinks five times, replace the remote control's batteries.

### *Installing the Remote Control Batteries*

1. Remove the remote control's back cover by gently pressing in the tab and lifting off the cover.
2. Load the batteries, making sure the polarities (+) and (-) are correct. For best results, insert the negative (-) end first.
3. Snap the cover back in place.




*The remote control requires two AA batteries.*

## *Appendix A: TV Care*

### Lamp-Cartridge Replacement

**CAUTION: If the television is on, press POWER to turn it off. Unplug the television and allow it to cool for at least one hour before attempting to replace the lamp cartridge.**

**CAUTION**

**BURN DANGER! HOT SURFACES INSIDE!**

**Touch lamp cartridge handle only. Do not touch lamp or lamp cartridge housing. Keep lamp cartridge horizontal during removal. Do not tilt as glass may come out and cause injury. Replace lamp cartridge only with the same part number 915B455012.**

#### *Lamp*

The light source for this television is a lamp, which is part of a lamp cartridge assembly. The life of the lamp can vary, based on the lamp itself, the air temperature around the TV while it is operating, the selected lamp mode, and your viewing patterns. Warmer air or poor ventilation shorten the lamp life, as does setting **Lamp Energy** to **Bright** and turning the television on and off frequently.

**Mitsubishi warrants the lamp for one (1) year from the date of original TV purchase at retail.**

**The lamp cartridge assembly is designed to be replaced by the TV owner. The cost of labor for a service technician to replace the lamp is not covered by the warranty.**

**WARNING**

THE ACCESS PANEL IS PROVIDED WITH AN INTERLOCK TO REDUCE THE RISK OF EXCESSIVE ULTRAVIOLET RADIATION. DO NOT DEFEAT ITS PURPOSE OR ATTEMPT TO SERVICE WITHOUT REMOVING PANEL COMPLETELY.

#### *Ordering a New Lamp*

**To Receive a Replacement Lamp Cartridge Assembly Under Warranty**

- Visit our website at **www.mitsuparts.com**.
- Call (800) 553-7278. Please have model number, serial number, and TV purchase date available.

**To Purchase a Replacement Lamp Cartridge Assembly After Warranty**

Visit our website at **www.mitsuparts.com** or call (800) 553-7278. Order the following:

**Lamp Part Number 915B455012**

#### *Lamp-Substitution Alert*

MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or Mitsubishi Authorized Service Center. MEVSA advises that replacement lamps obtained separately from the Lamp Cartridge and/or Lamp Assemblies obtained from unauthorized sellers may be incorrect for your television, may not fit or perform properly and may even damage your television. MEVSA can not be responsible for the performance, reliability or safety of any replacement lamps that are obtained from unauthorized sources.

**WARNING**

- Do not remove the lamp cartridge immediately after turning off the television. You may get burned because the lamp is very hot. Allow the television to cool for at least one hour before replacing the lamp cartridge.
- Do not remove the lamp cartridge except when replacing it. Careless treatment can result in injury or fire.
- Do not touch the lamp glass element. It may be very hot and break, causing injuries or burns.
- Be sure not to insert any metal or flammable object into the lamp cartridge opening, as it may cause fire or electrical shock. If a foreign object is inserted into the opening, unplug the AC cord of the TV and contact your dealer for service.
- Install the lamp cartridge securely. Failure to do so may cause a fire.
- Do not touch the lamp glass elements. Oils from your fingers may cause premature lamp failure.

Hg = MERCURY

THE LAMP INSIDE THIS PRODUCT CONTAINS MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance at **www.eiae.org**

# Appendix A: TV Care

## Replacement Procedure

### Removing the Old Lamp Cartridge

1. Turn off TV power and unplug the TV. Allow the lamp to cool for at least one hour before proceeding.
2. After the lamp has cooled, remove the cover of the lamp compartment, located on the back of the TV.

   Refer to figures 1 and 2. Use a medium Phillips screwdriver to loosen the screws securing the cover.
   Keep the screws and cover for re-installation.
3. With a medium Phillips screwdriver, loosen the screw securing the lamp cartridge until it disengage from the mating threads. This is a captive screw and cannot be separated from the lamp cartridge.
4. Fully open the bag supplied with the replacement lamp and set the opened bag aside.
5. Gently grasp the handle of the lamp cartridge and pull the old cartridge straight out. See figure 3.

   **CAUTION:** Do not tilt or rotate the cartridge, as small glass fragments may fall out.
6. Without tilting or putting down the lamp cartridge, insert it into the opened bag. Close the bag while being careful not to let any glass particles fall out.

### Installing the New Lamp Cartridge

1. **Do not touch** the glass parts of the new lamp cartridge. Insert the new cartridge into the TV in the same orientation as the old cartridge. Push on the cartridge housing until it is fully seated.
2. Gently tighten the lamp screw with the screwdriver. AVOID OVERTIGHTENING!
3. Replace the plastic cover and retaining screws.
4. WASH YOUR HANDS THOROUGHLY, AS THIS LAMP CONTAINS MERCURY.

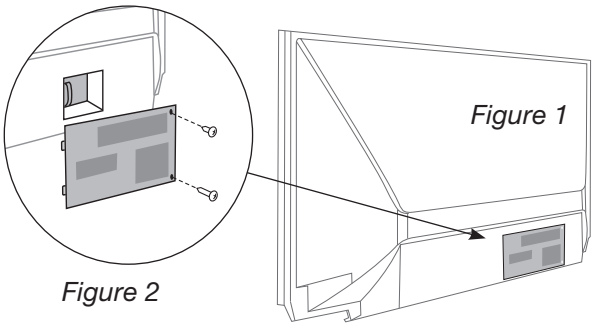



Figure 2

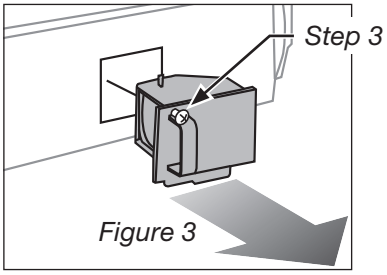



Figure 3

**Use only replacement lamp part number 915B455012.**

### Disposal of the Old Lamp Cartridge

Contact your local authorities or the Electronic Industries Alliance at www.eiae.org for lamp-disposal or recycling instructions. Do not dispose of the old lamp with common trash.

## *Appendix B: Troubleshooting*

| General TV Operation | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **1.** | The TV remote control does not work. | • Check that the batteries are fresh and installed correctly.<br>• Be no more than 20 feet from the TV when using the remote control.<br>• If using an external 3D emitter, try pointing the emitter in a different direction or disconnect the emitter.<br>• There may be interference from the TV's internal IR emitters for 3D glasses. Turn off the emitters in the ***Picture > 3D Mode*** menu. |
| **2.** | When I try to use the remote control, the **POWER** key blinks five times. | Replace the batteries. |
| **3.** | TV does not respond to the remote control or to control-panel buttons and TV will not power on or off. | • Unplug the AC power cord for 10 seconds.<br>• Press and hold the **POWER** button on the control panel for ten seconds to perform system reset. |
| **4.** | When a device is selected from the ***Input Selection*** menu, the screen is blue or black (no signal source). | • Make sure the selected device is turned on.<br>• Check connections to the device.<br>• Begin play of the device. |
| **5.** | You have forgotten your Lock menu pass code. | See "Bypassing TV Locks," page 35. |
| **6.** | Rating restrictions are not working. | Open the ***Lock > Parental*** menu and:<br>• Verify that the ratings locks are active.<br>• Check the Lock Time/Unlock Time to check if rating restrictions are disabled.<br>• Rating restrictions apply only to content on the **ANT** input and composite **Y/VIDEO** inputs. |
| **7.** | On-screen displays appear each time you change a function. | Normal TV operation. |
| **8.** | A warning message appeared on screen stating, "TV will shut down in a few seconds. Please check if the air flow is blocked." | • Internal TV temperature has exceeded proper levels. Cool the room.<br>• The TV has overheated. Clear blocked air vents and ensure at least four inches of clearance on all sides of the TV. |

### Service and Customer Support

***Service***

If you are unable to correct a problem with your TV, consult Mitsubishi Consumer Relations at 1 (800) 332-2119.

- DO NOT adjust any controls other than those described in this Owner's Guide and the on-line supplemental Owner's Guide.
- DO NOT remove the protective back cover of your TV.

***Customer Support***

- To order replacement or additional remote controls, visit our website at **www.mitsuparts.com** or call 1 (800) 553-7278.
- For questions:
  - Call Consumer Relations at 1 (800) 332-2119.
  - E-mail: **TVsupport@mevsa.com**
  - Website: **www.mitsubishi-tv.com**

## *Appendix B: Troubleshooting, continued*

| **General TV Operation** | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **9.** | I have turned on CEC for my HDMI devices but control is erratic and I wish to disable it. | • First turn off the TV's HDMI control for the specific device. Open the ***Inputs > HDMI Control*** menu, select the device, select **Off**.<br>• Disable CEC on the device itself. See the device's instructions.<br>• If the problem persists, do the following:<br>**1.** Disconnect the device from the TV.<br>**2.** Open the ***Inputs > Name*** menu and select **Delete** for the device.<br>**3.** Reconnect the device to the TV and Auto Input Sensing will recognize the device with CEC disabled. |

| **TV Channels** | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **1.** | The TV takes several seconds to respond to channel changes. | • It is normal for digital channels to take longer to tune in.<br>• Press **ENTER** after entering a channel number to minimize delays.<br>• Use a 4-digit number for an over-the-air digital channel.<br>• Use a 6-digit number for digital cable channels if your cable service is able to recognize 6-digit channel numbers. |
| **2.** | You cannot access a channel. | • Use number keys instead of **CH**.<br>• Be sure the channel you want to view is in memory.<br>• Check that the TV is switched to the correct device or antenna for that channel by pressing the **INPUT** key.<br>• Make sure the ***Lock > Parental*** menu lock is set to **Off**.<br>• If you cannot tune to a virtual digital channel even though the TV has already memorized digital channels, tune to the physical channel number used by the broadcaster. The virtual channel will then be automatically added to memory.<br>• You may be trying to tune to an analog channel that is no longer broadcasting. |

## *Appendix B: Troubleshooting, continued*

| **TV Power On/Off** | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **1.** | TV takes an excessively long time to power on. | When powered on, the TV needs time to boot up, just as a computer does. |
| **2.** | You cannot program the TV to turn on automatically (Timer function) | • The TV may be locked.<br>• The clock may not be set. |
| **3.** | TV turned itself off and the light on the front panel started to blink. | • Momentary power fluctuation can cause the TV to turn off to prevent damage. Wait for the green light to stop flashing and turn the TV on again.<br>• If the TV does not stay on, press the **POWER** button on the control panel for ten seconds to perform System Reset. If this happens frequently, obtain an AC line power conditioner/surge protector.<br>• An unusual digital signal may have been received, triggering a protection circuit. Wait for the light to stop flashing and turn TV on. |
| **4.** | TV will not power off. | Press the **POWER** key on the control panel for ten seconds to perform System Reset. |

| **Picture** | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **1.** | Picture does not look like a high-definition picture. | Not all signals are high-definition signals. To receive high-definition programming from your cable or satellite provider, you must subscribe to the provider's high-definition service. Some over-the-air broadcasts are in high-definition and can be received with a high-quality antenna suited to your location. |
| **2.** | TV has sound but no picture. | • Press **MENU** on the remote control. If the menu displays, then there is a problem with the incoming signal.<br>• Check that all video inputs are plugged in firmly.<br>• Press and hold the **POWER** button on the control panel for ten seconds to perform System Reset. |
| **3.** | Picture has become dimmer. | • The lamp is nearing the end of its life. Order a new lamp.<br>• Adjust picture brightness and contrast to maximum levels.<br>• Change **Lamp Energy** from **Standard** to **Bright**. |
| **4.** | You cannot view a picture when playing a VHS tape. | Check your VCR's owner's guide for further troubleshooting. |
| **5.** | VCR or DVD player's on-screen menus jitter up and down. | Stop playback. Possible cause: Many VCRs and DVD players provide on-screen menus at only half-resolution that may appear to jitter up and down. |
| **6.** | When viewing a stopped VCR, white lines are rolling on the screen. | • Turn off video mute for the VCR.<br>• Begin playing the tape.<br>• Change the VCR input from Line 1 to the VCR antenna input. |
| **7.** | A color program appears as a black and white image, or the colors are dim, or the screen is black. | 842 Series. The PerfectColor color balance has been incorrectly set. Reset the PerfectColor balance. |
| **8.** | Picture from an HDMI input is noisy (poor quality). | Upgrade a standard (unmarked) HDMI cable to a high-speed HDMI cable. |
| **9.** | The image from a computer appears distorted when viewed on the TV. | • Normal TV operation. The TV does not correct distortion in the picture from a computer because the correction process may cut off the edges of the image.<br>• The aspect ratio may be wrong for the image. Press **FORMAT** to change. |

## *Appendix B: Troubleshooting, continued*

| **Sound** | | |
|---|---|---|
| | **Symptom** | **Remarks** |
| **1.** | There is no sound even when the volume is turned up. | • Check if the **MUTE** key is on.<br>• The TV's analog **Listen to** setting may be set to SAP (analog program from the ANT input) but no SAP is being broadcast.<br>• Check that the ***Sound > Audio > TV Speakers*** option is set to **On** to hear sound from the TV speakers. Possibly the **TV Speakers** option is **Off**.<br>• If using an A/V receiver, check that the ***Sound > Audio > TV Speakers*** option is set to **Off** to hear sound from the A/V receiver speakers.<br>• Press and hold the **POWER** button on the control panel for 10 seconds to perform System Reset.<br>• The language selected in the ***Setup > Antenna Digital Audio*** menu is not being broadcast for the current program. |
| **2.** | The sound does not match the screen picture. | The TV's analog **Listen to** setting may be set to SAP (analog program from the **ANT** input). |
| **3.** | The sound from my A/V receiver does not match the screen picture (I should hear the correct audio from my A/V receiver). | • Check that **DIGITAL AUDIO OUTPUT** and/or **AVR AUDIO OUTPUT** on TV's connection panel is connected to the A/V receiver. Without this connection, devices connected only to the TV (and not the A/V receiver) can be heard only from the TV speakers. Note that this includes the **ANT** input, a device (such as a camcorder) connected to the TV, and any other device sending audio to the TV only.<br>• Make sure the A/V receiver is set to the correct input. |
| **4.** | Cannot select an audio-only device; it does not appear in the ***Input Selection*** menu. | Plug an unused video plug into the **Y/VIDEO** jack to activate Auto Input Sensing. Assign the name **CD/Audio** or **MP3** to make the audio device selectable in the ***Input Selection*** menu. |
| **5.** | Sound is coming from the TV speakers instead of the A/V receiver. | • Connect the TV's audio output to the A/V receiver.<br>• Change TV Speakers setting to **Off**. |

**Stream TV-VNC Problems**

| | **Symptom** | **Remarks** |
|---|---|---|
| **1.** | The VNC PC cannot be connected. | • Check that the VNC PC (server) is turned on.<br>• Check that only one VNC server application is running on the PC. If multiple VNC applications are running on the PC simultaneously, it causes interference of the server.<br>• Check the firewall setting on the PC. The firewall may need to be bypassed by adding the VNC server application to the exception list of Windows® firewall setting. |

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# Mitsubishi TV Software

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MITSUBISHI ELECTRIC

**Website:**
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**TVsupport@mevsa.com**

## For questions, call Consumer Relations at

## 1 (800) 332-2119

## To order replacement or additional remote controls or lamp cartridges,

## Visit our website www.mitsuparts.com

## or call

## 800-553-7278

### Lamp-Substitution Alert

MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or Mitsubishi Authorized Service Center. MEVSA advises that replacement lamps obtained separately from the Lamp Cartridge and/or Lamp Assemblies obtained from unauthorized sellers may be incorrect for your television, may not fit or perform properly and may even damage your television. MEVSA can not be responsible for the performance, reliability or safety of any replacement lamps that are obtained from unauthorized sources.

**SYSTEM RESET**

If the TV does not respond to the remote control, control-panel buttons, or will not power on/off, press and hold the **POWER** button on the control panel for ten seconds.

The TV will turn off. Power on the TV and the green LED will flash quickly for about one minute. Recent settings changes may be lost.


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